

Fig. 1

414712

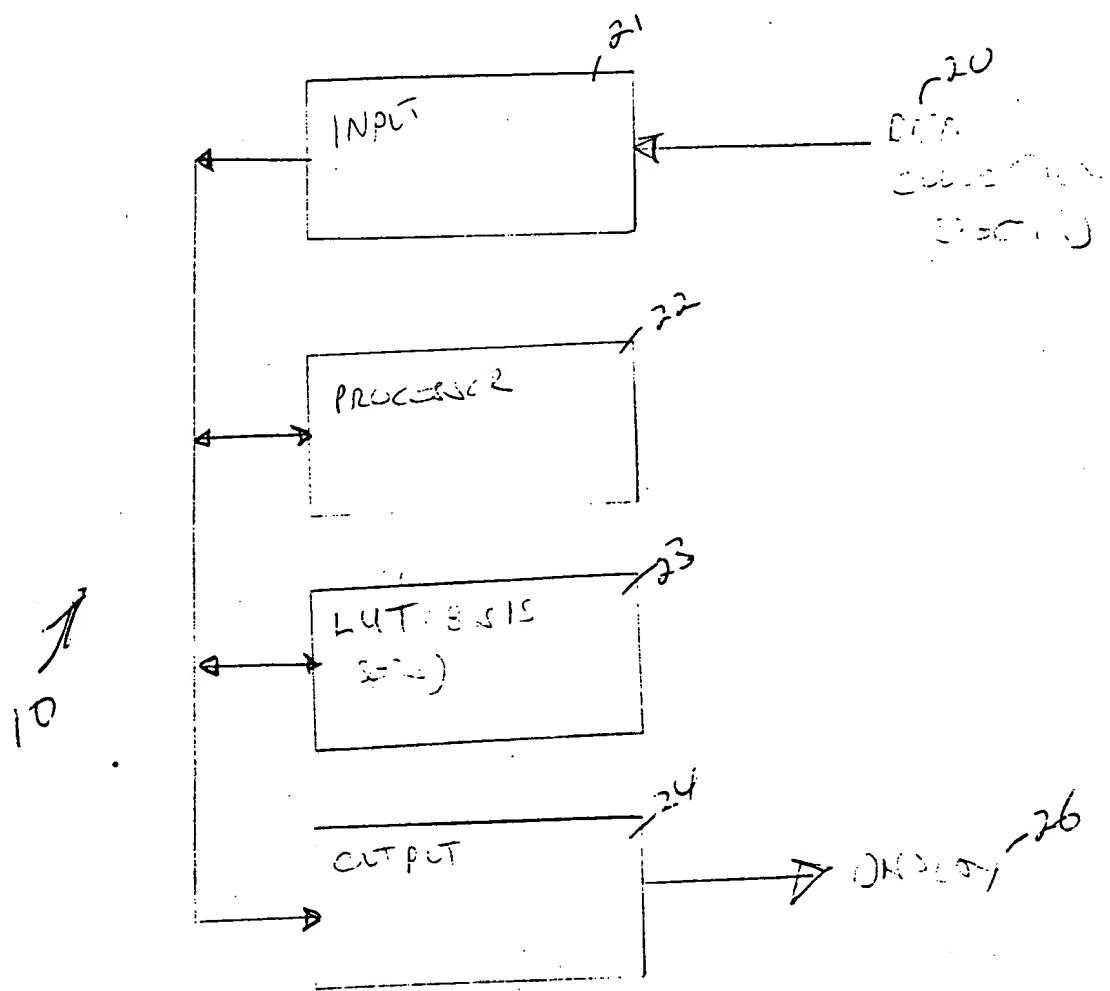


Fig. 2

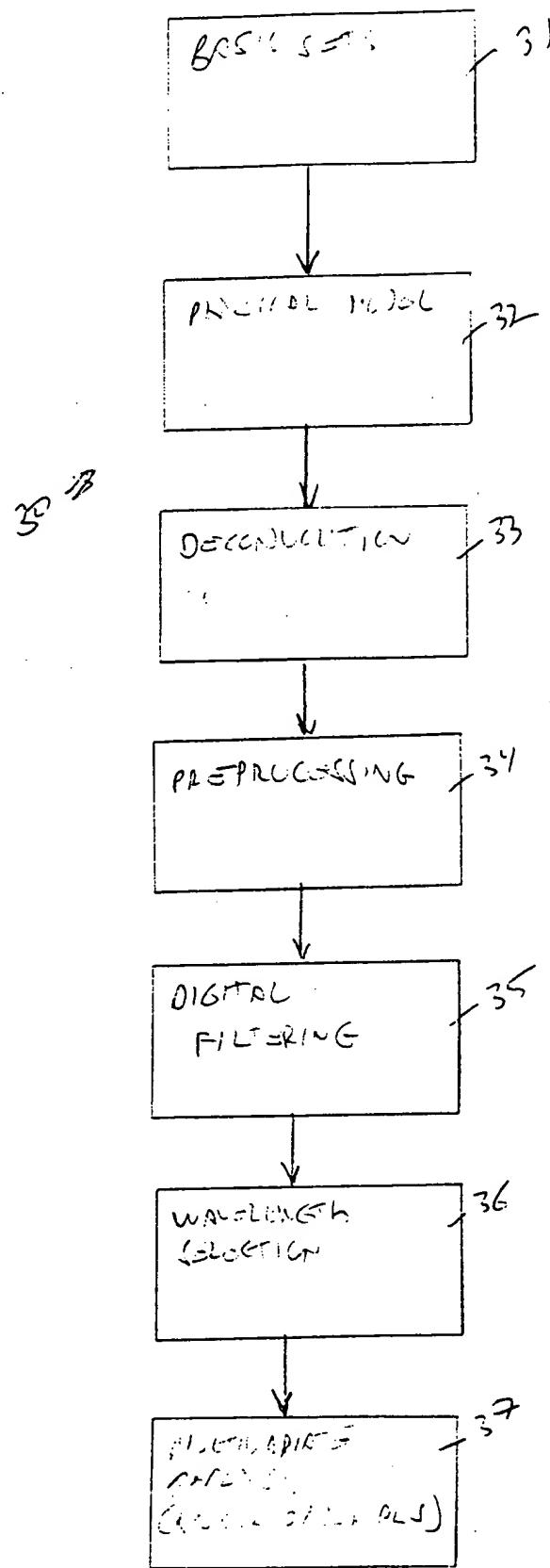


Fig. 3

Water Absorbance  
(b=1 mm)

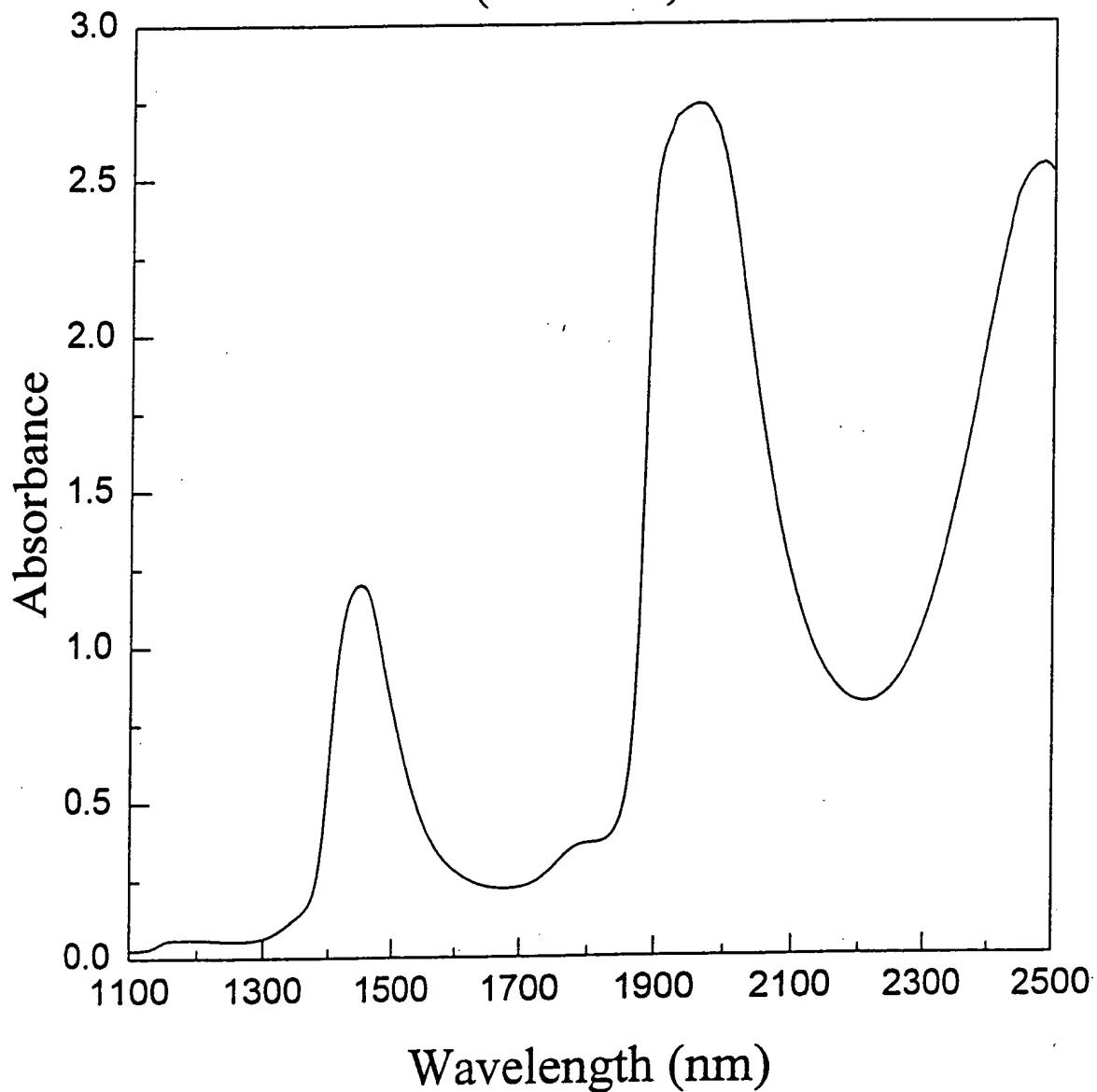


FIG. 4

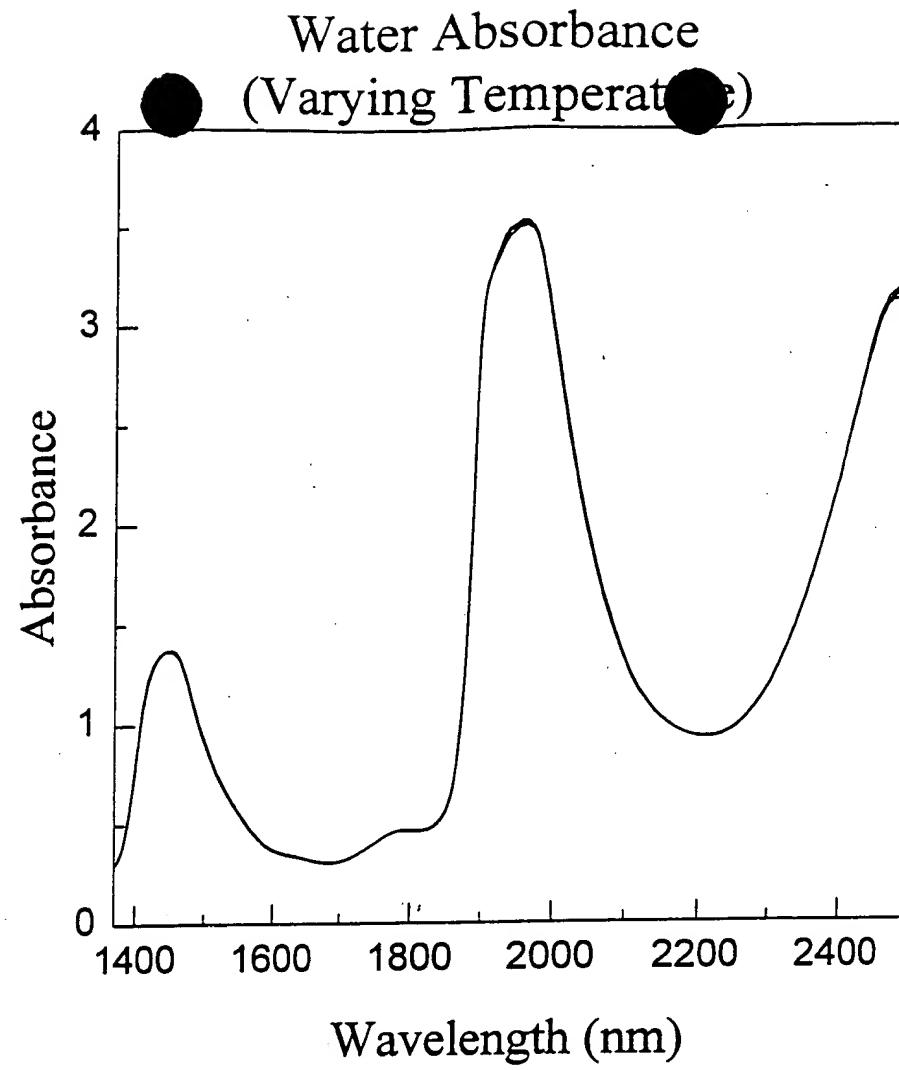


Fig. 5a

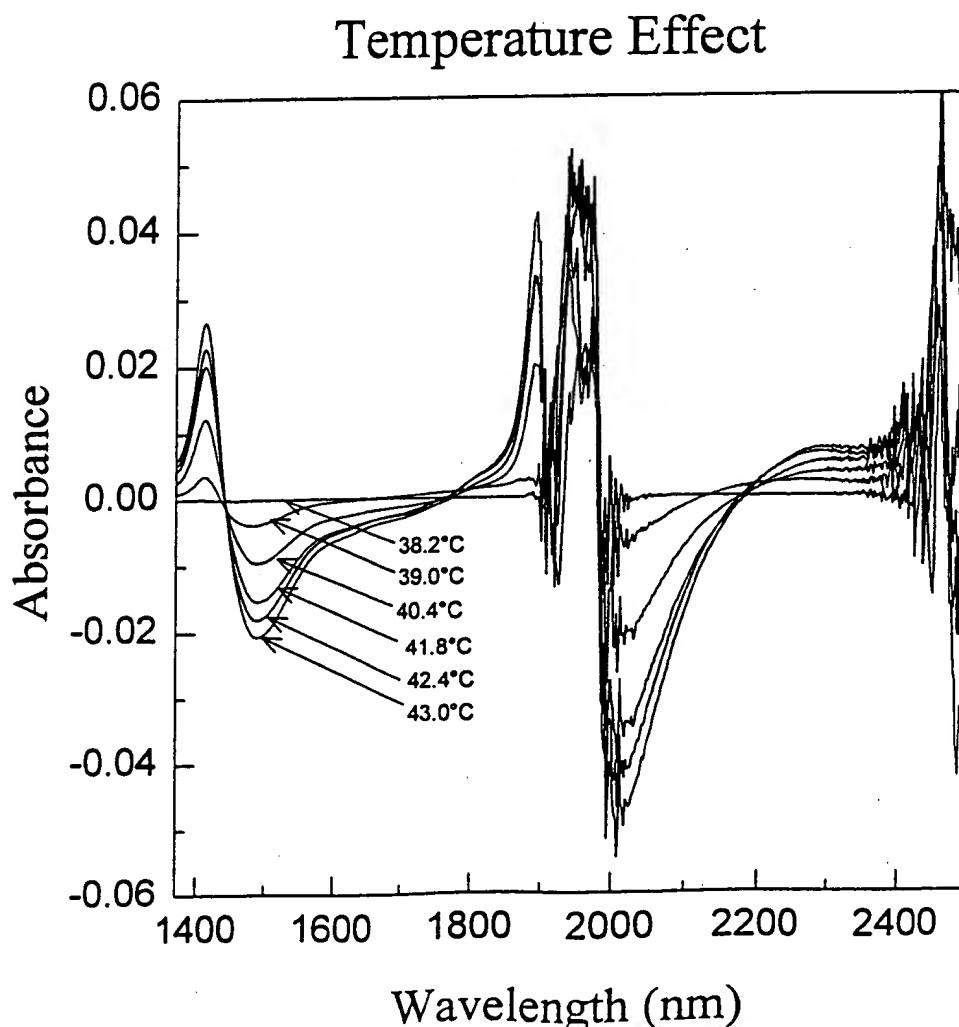


Fig. 5b

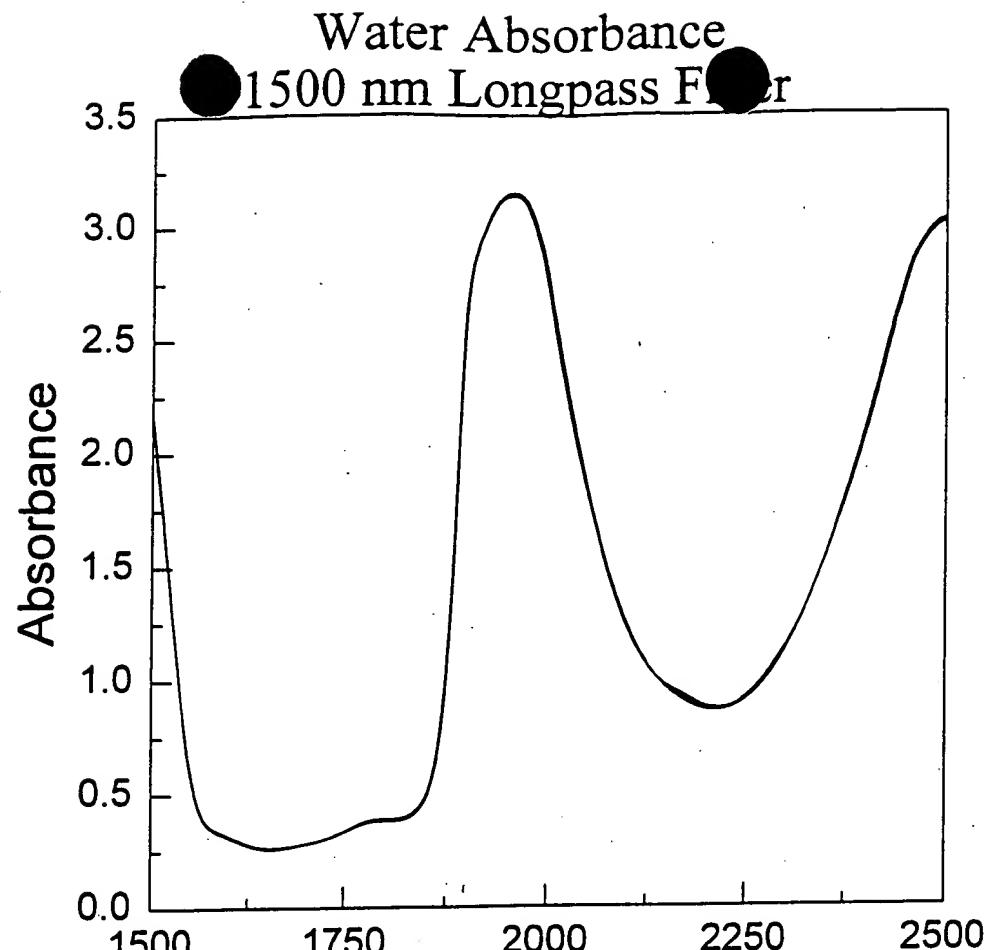


Fig. 6a

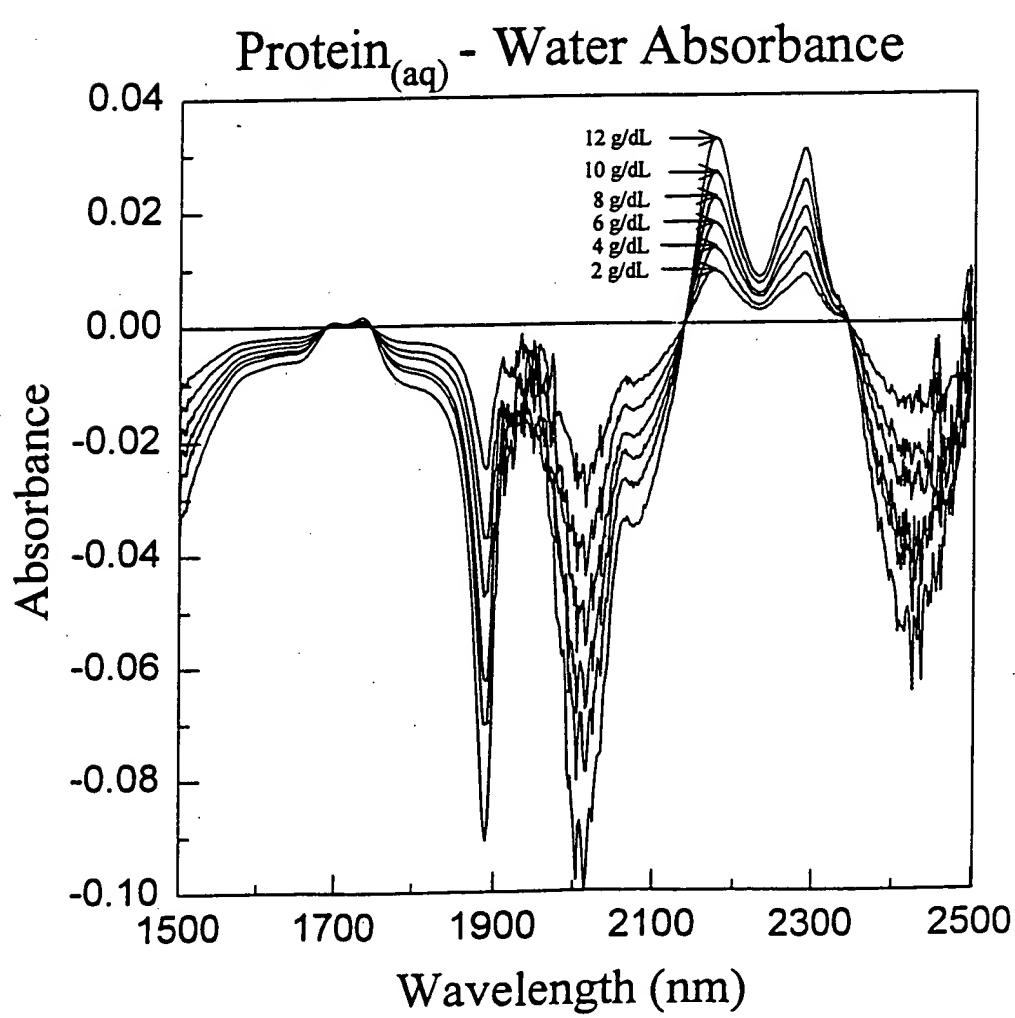
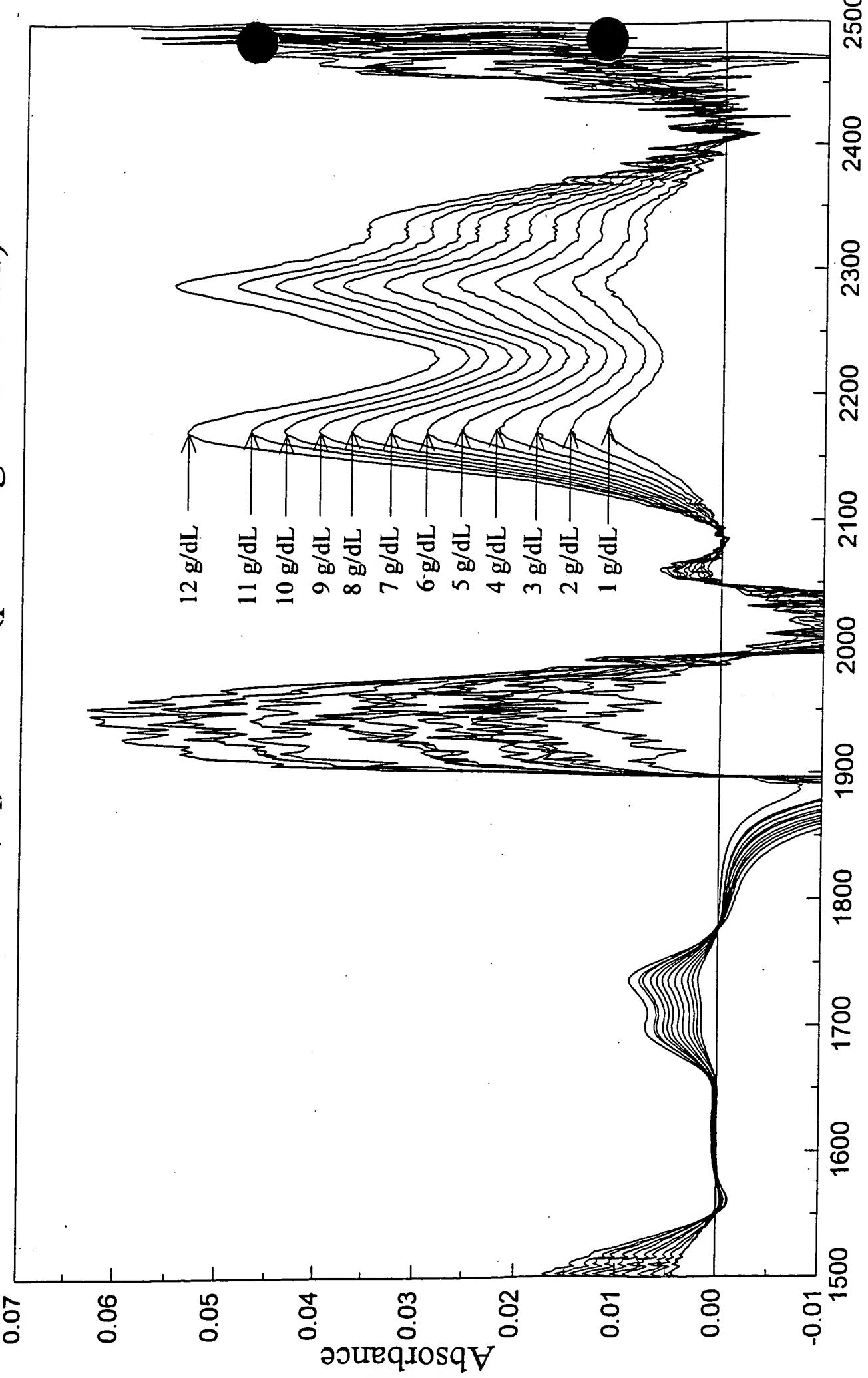


Fig. 6b

## Albumin(aq) - Buffer(pathlength corrected)

FIG 7  
Wavelength (nm)

Globulin<sub>(aq)</sub> - Buffer

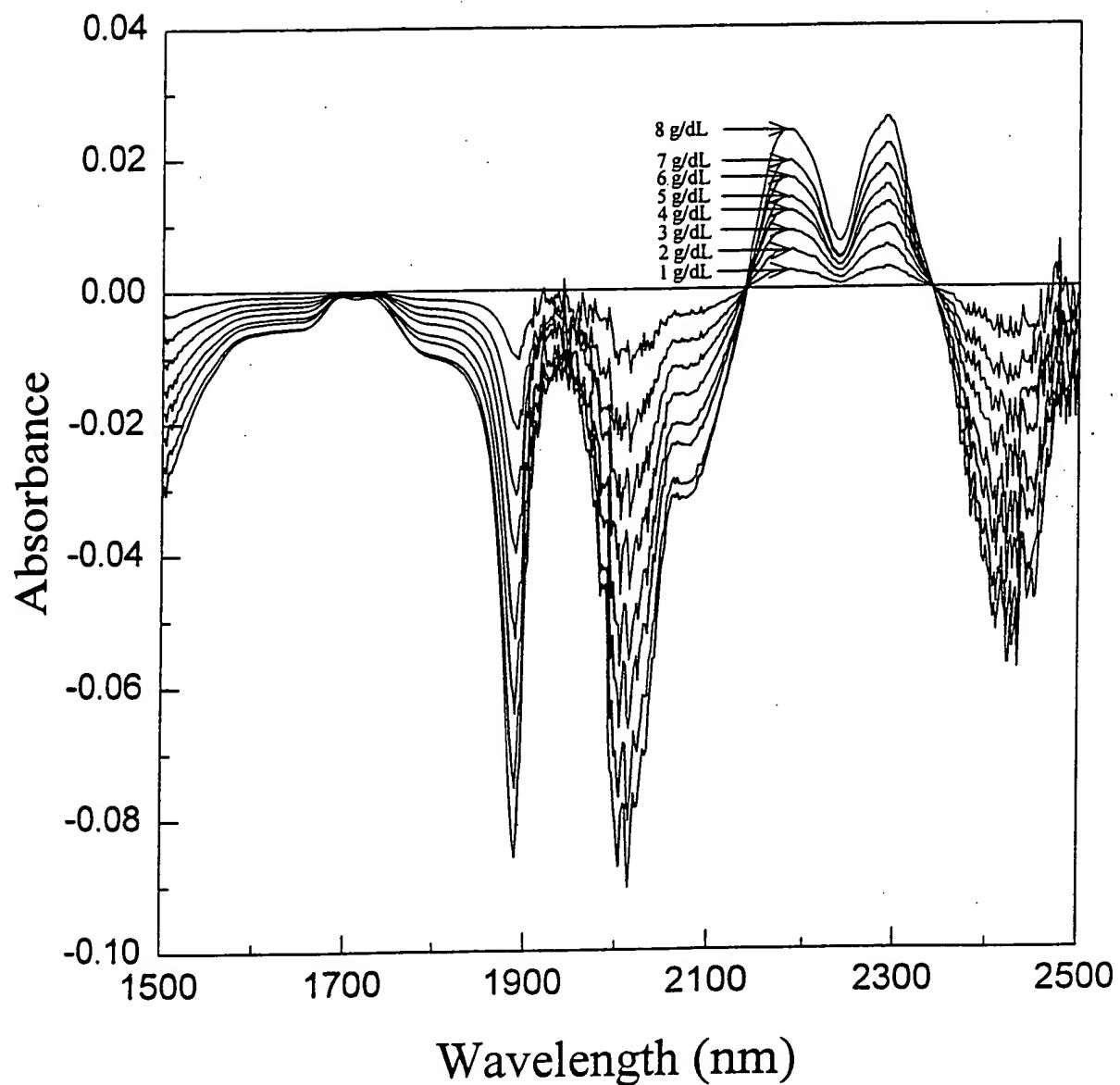


FIG. 8

Globulin<sub>(aq)</sub> - Buffer(pathlength corrected)

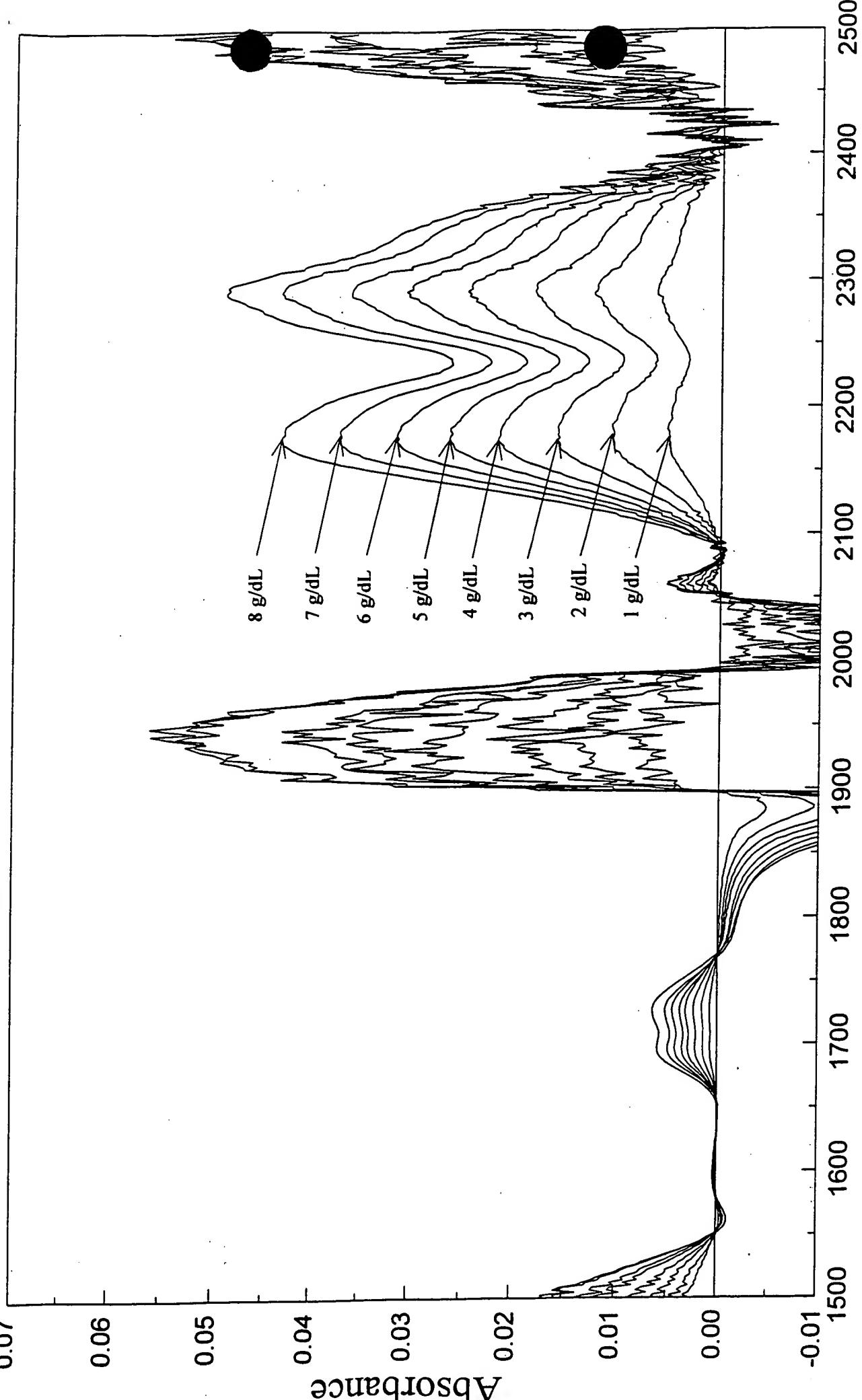


FIG 9

Pathlength Corrections Required  
(Albumin, Globulin, & Triacetin)

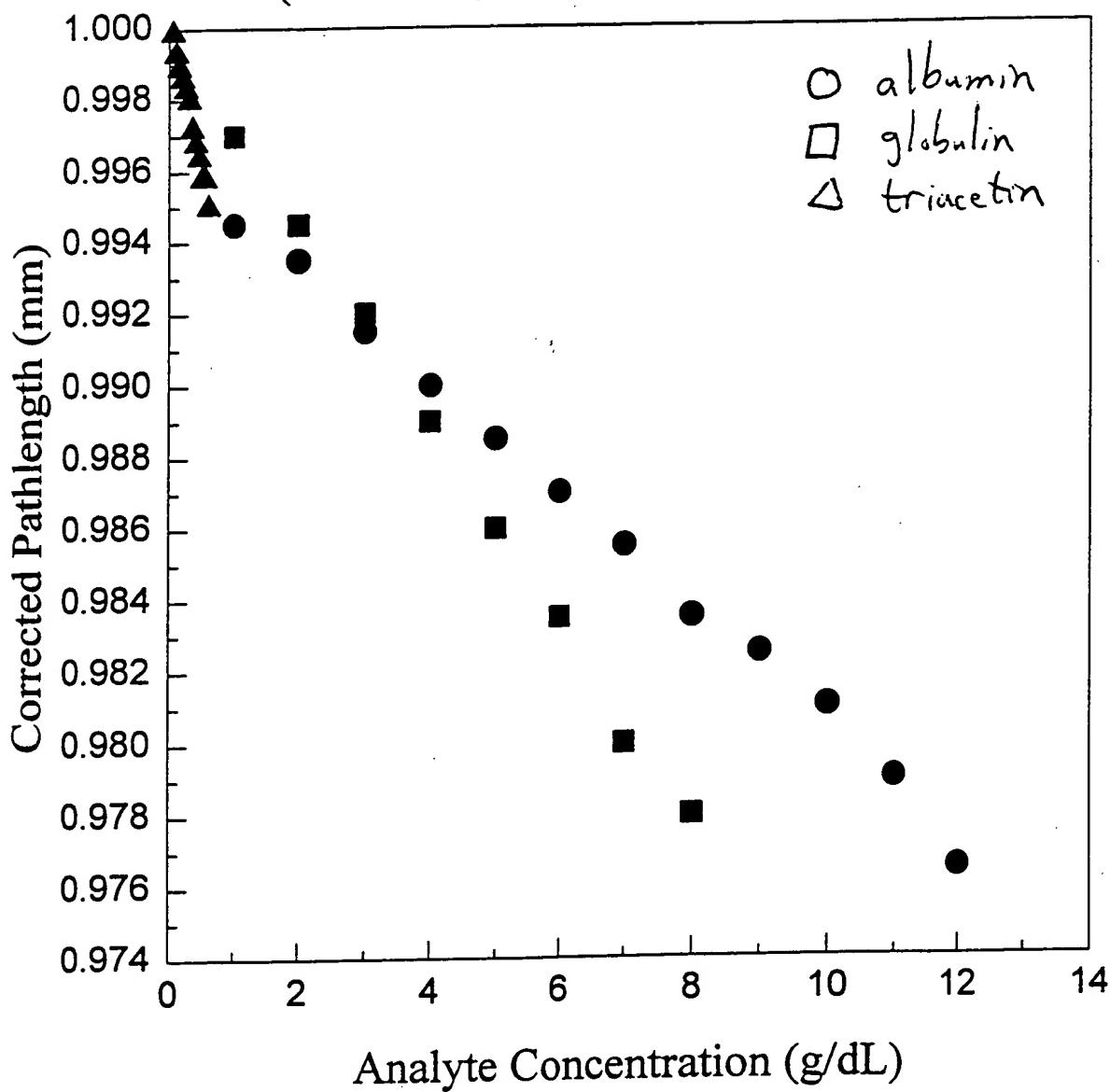


FIG. 10

Triacetin<sub>(aq)</sub> - Buffer(pathlength corrected)

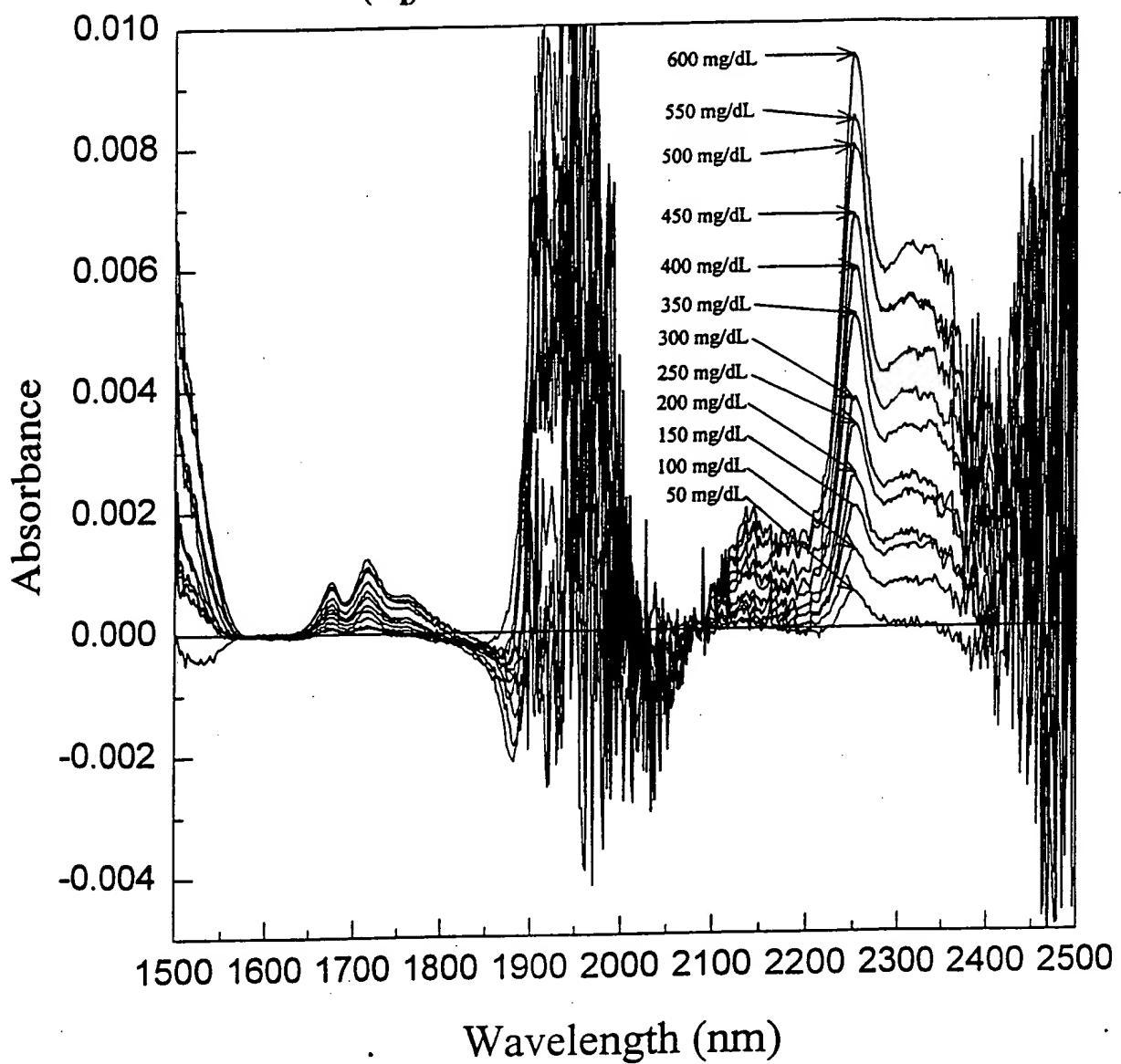
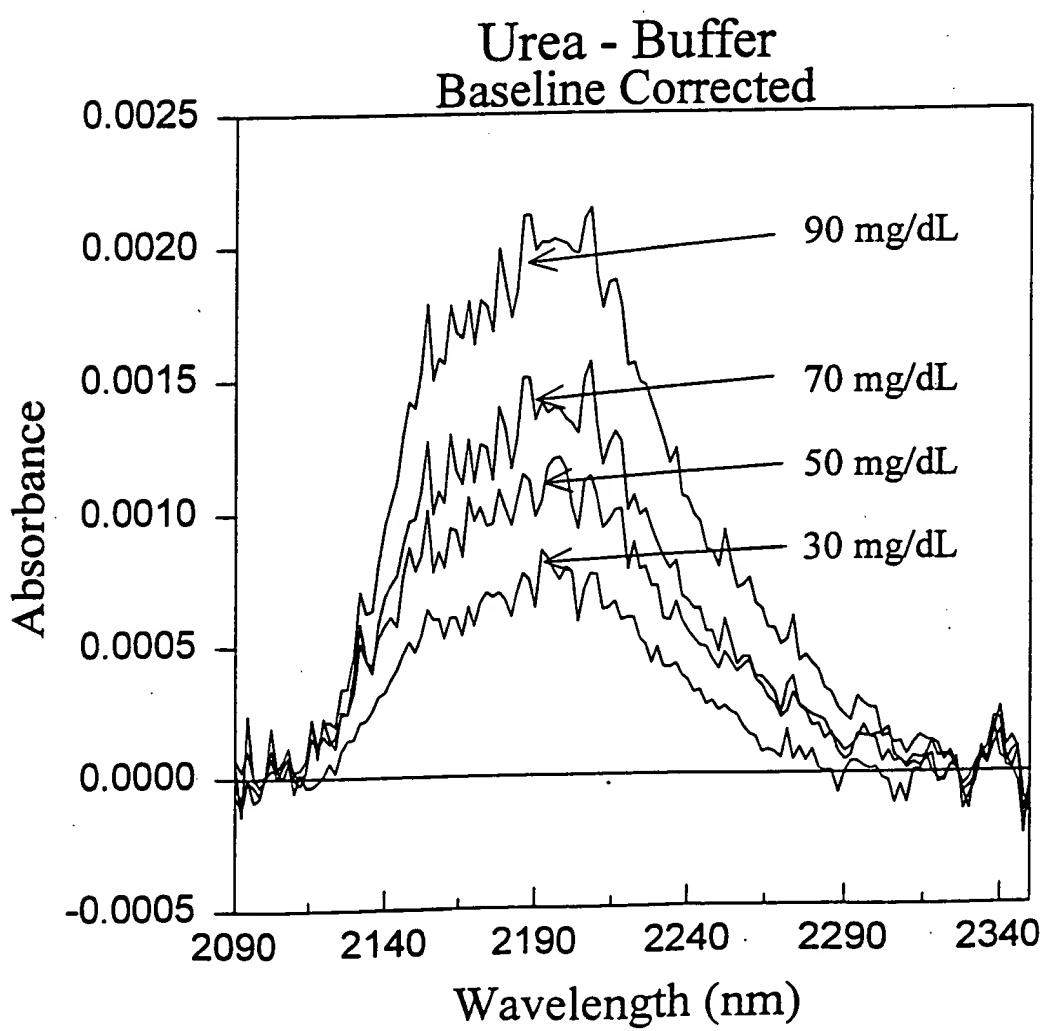
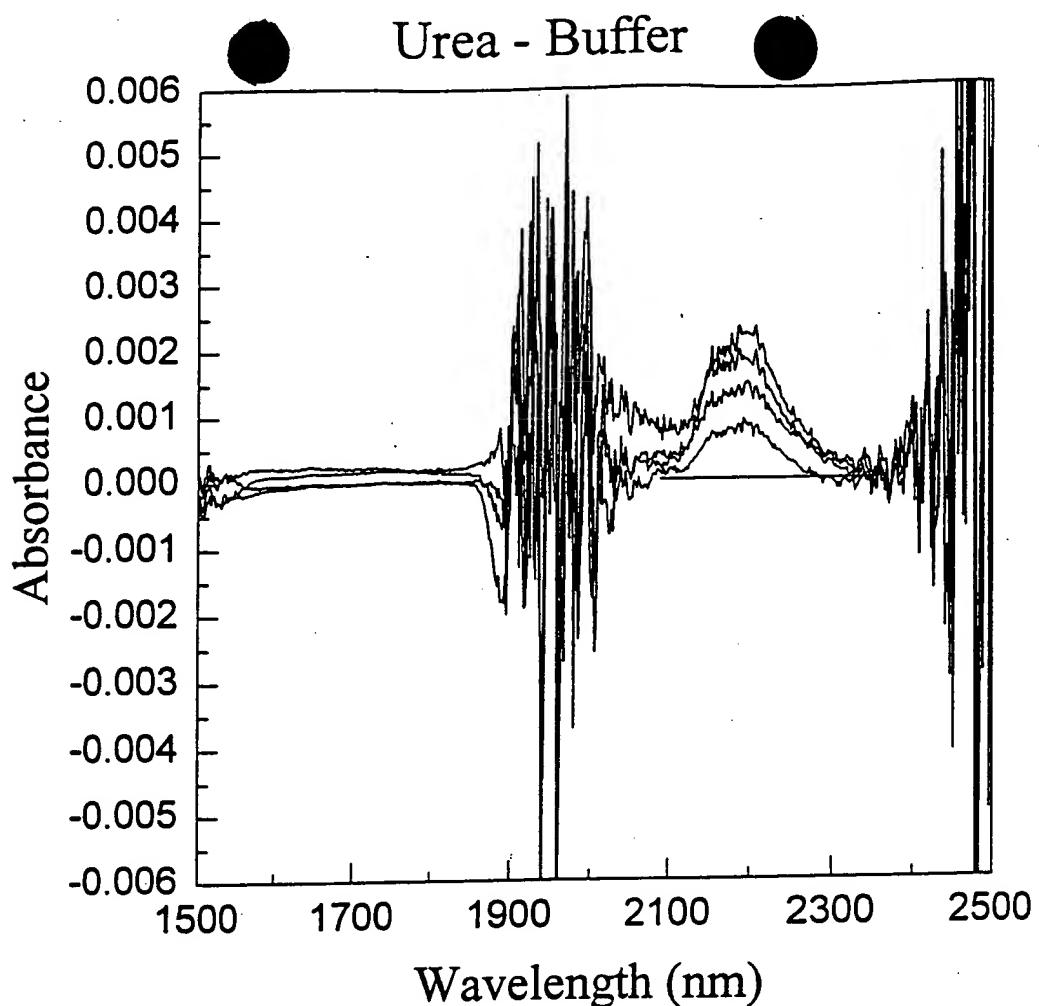


FIG. 11



## Glucose - Buffer

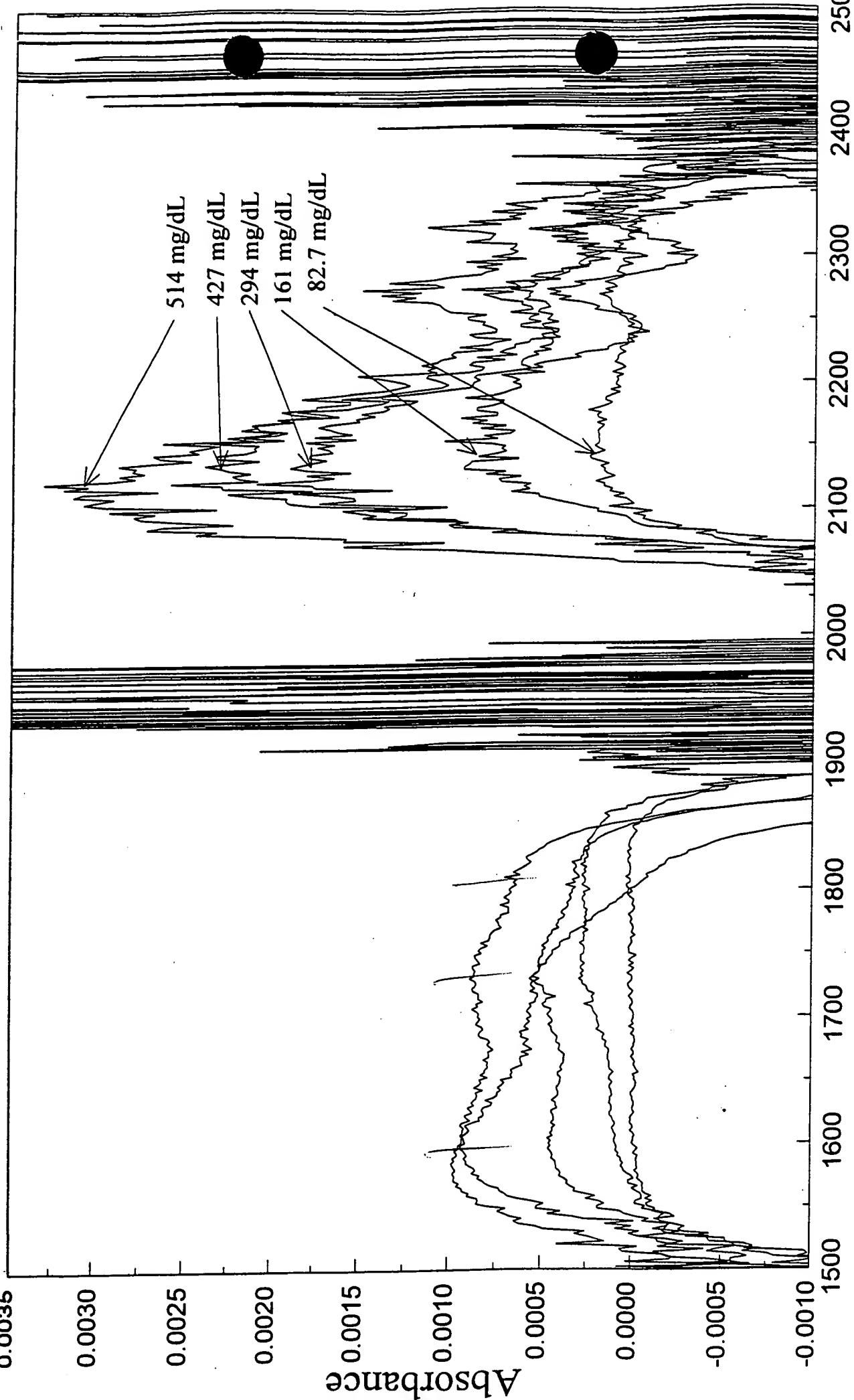


FIG. 13

Solid Samples

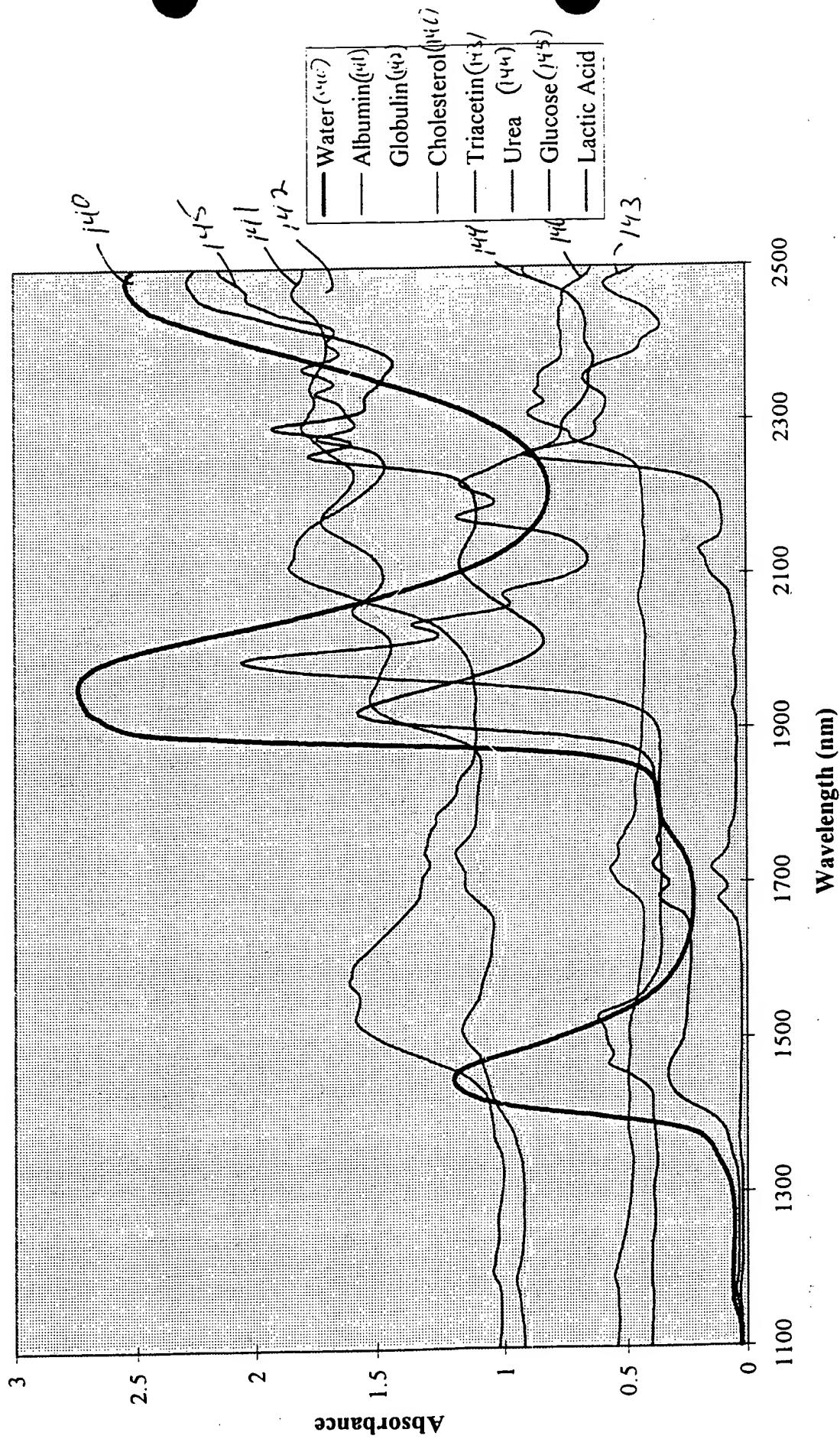


FIG. 14

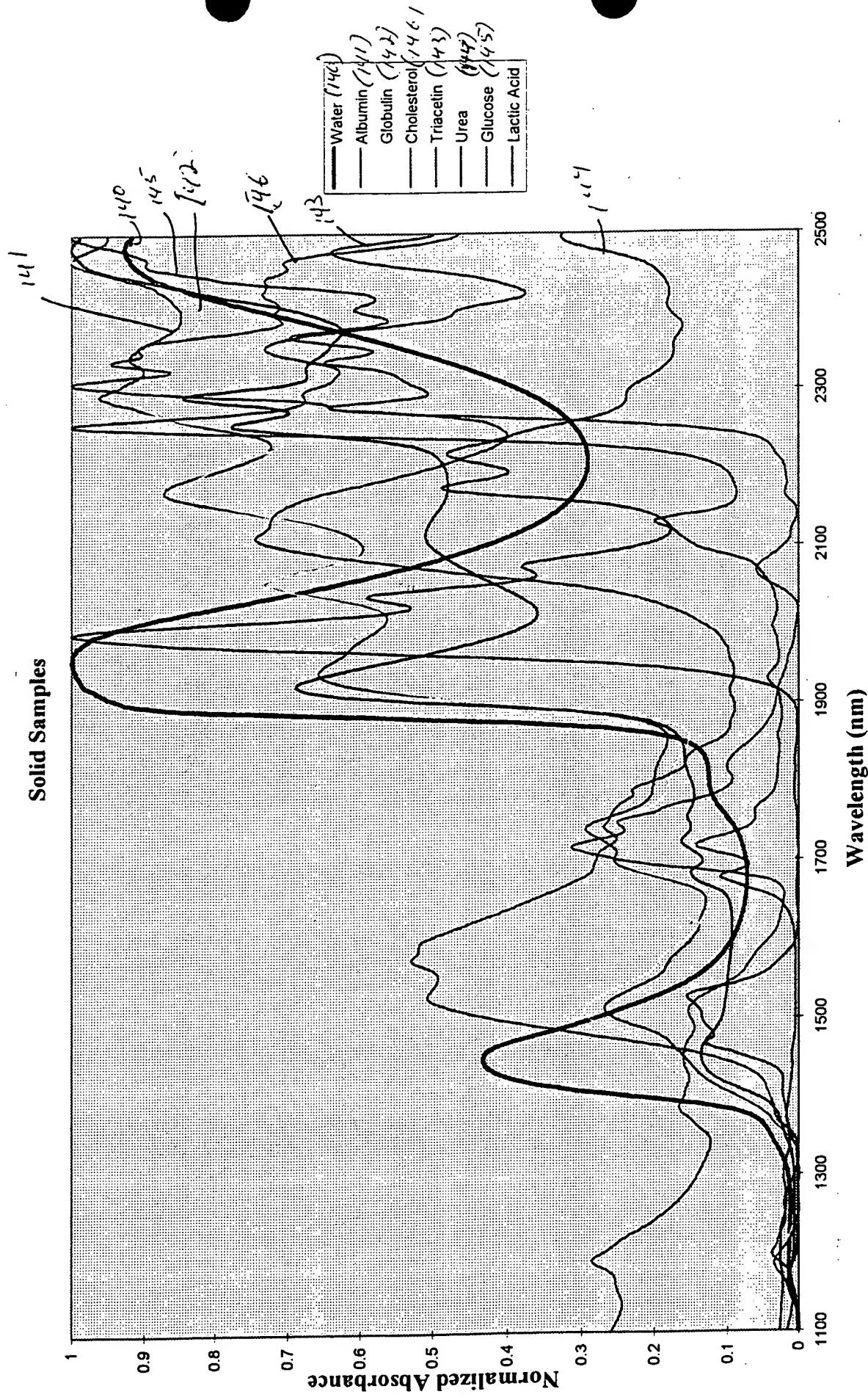


FIG. 15

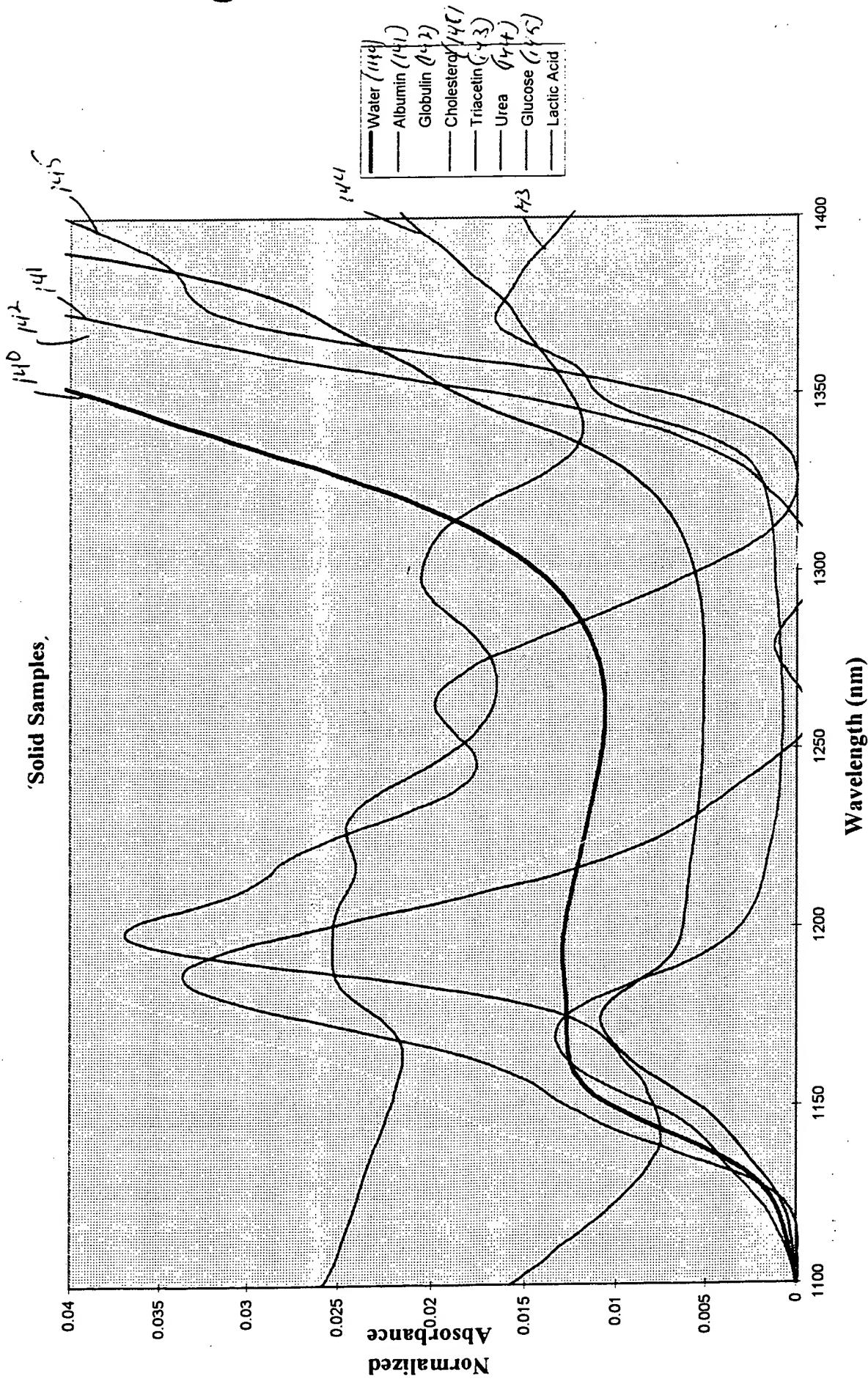


FIG. 16

Glucose<sub>(aq)</sub>

Range 1: (2078 to 2243 nm); Resolution = 2 nm

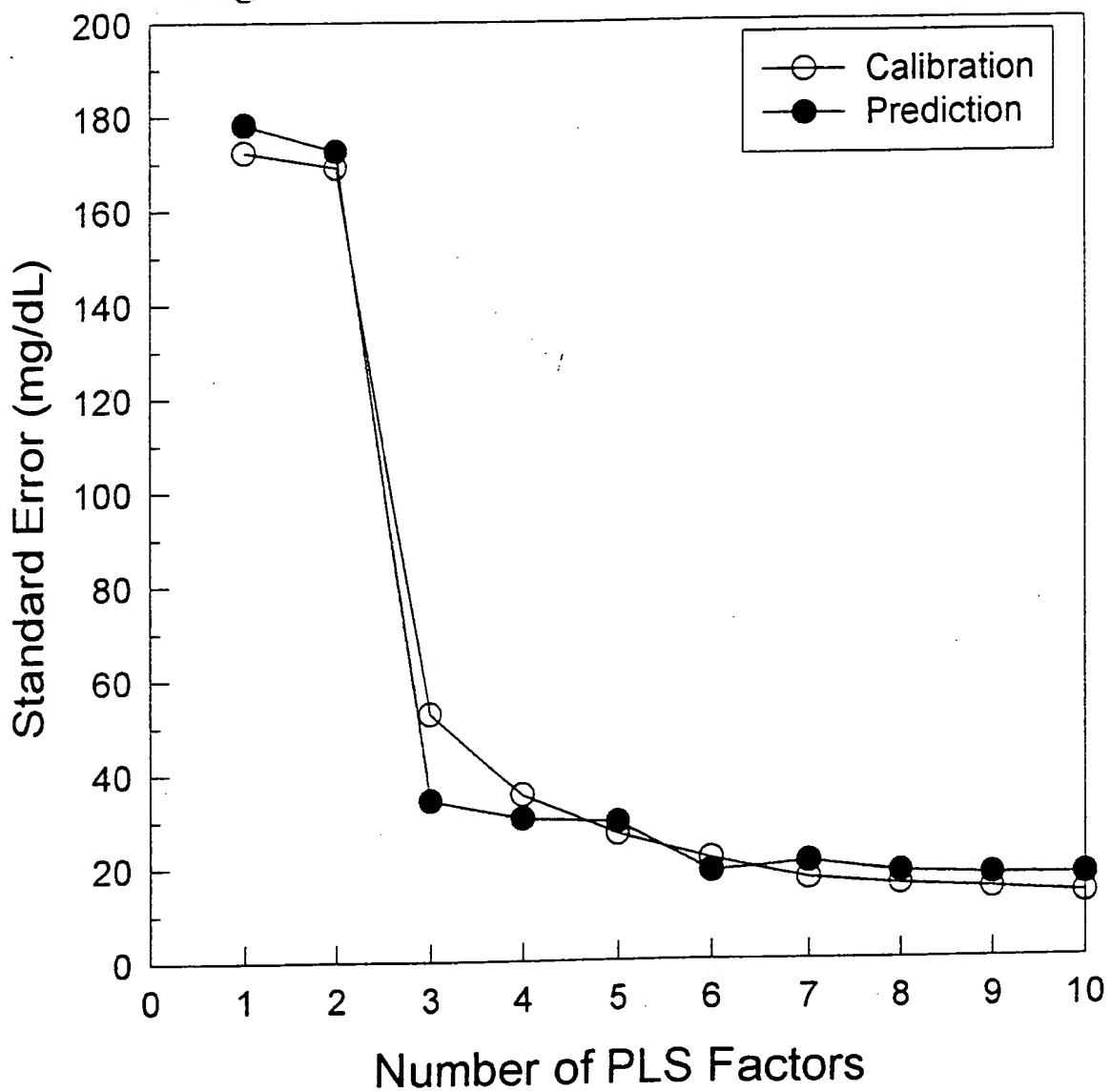
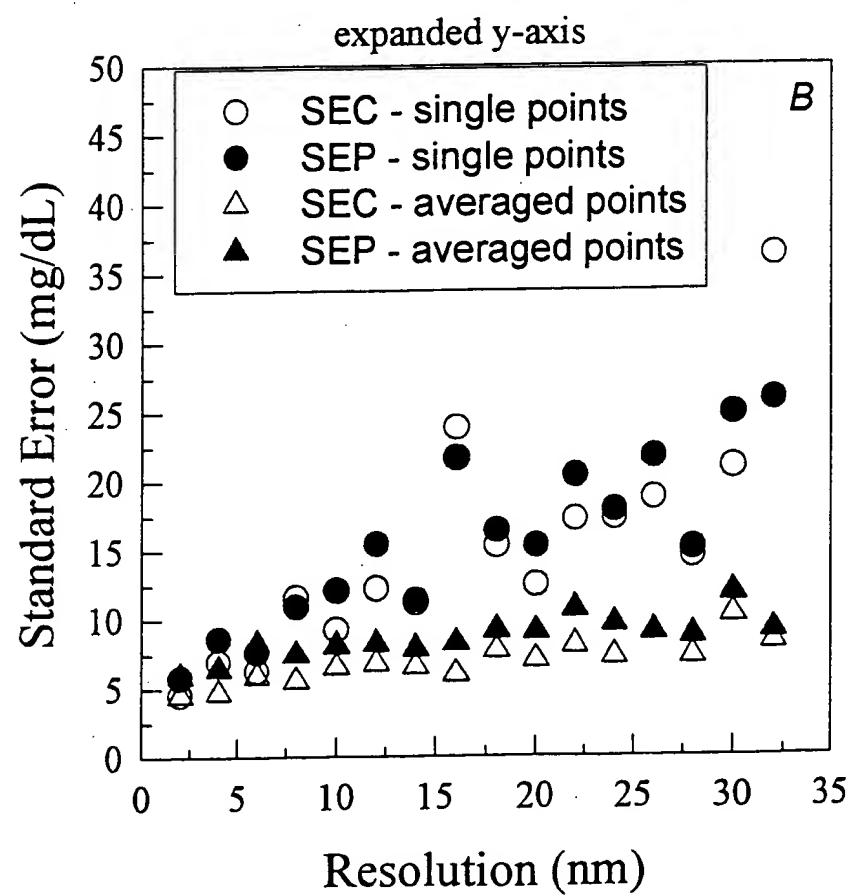
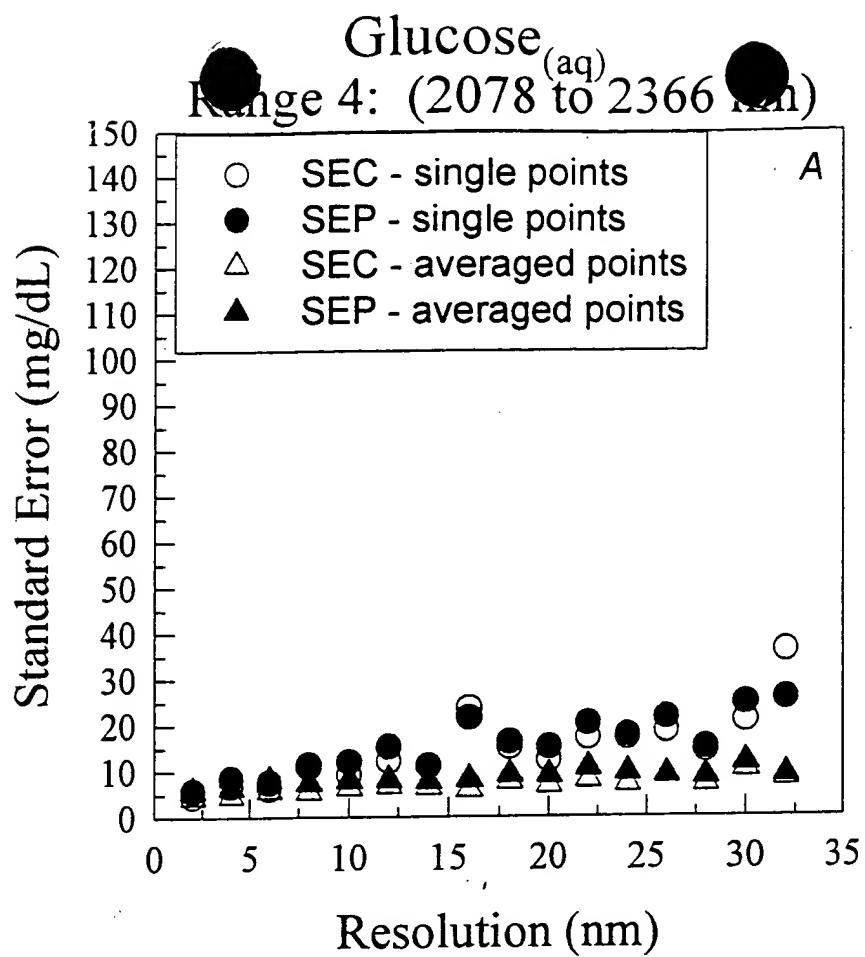


FIG. 17



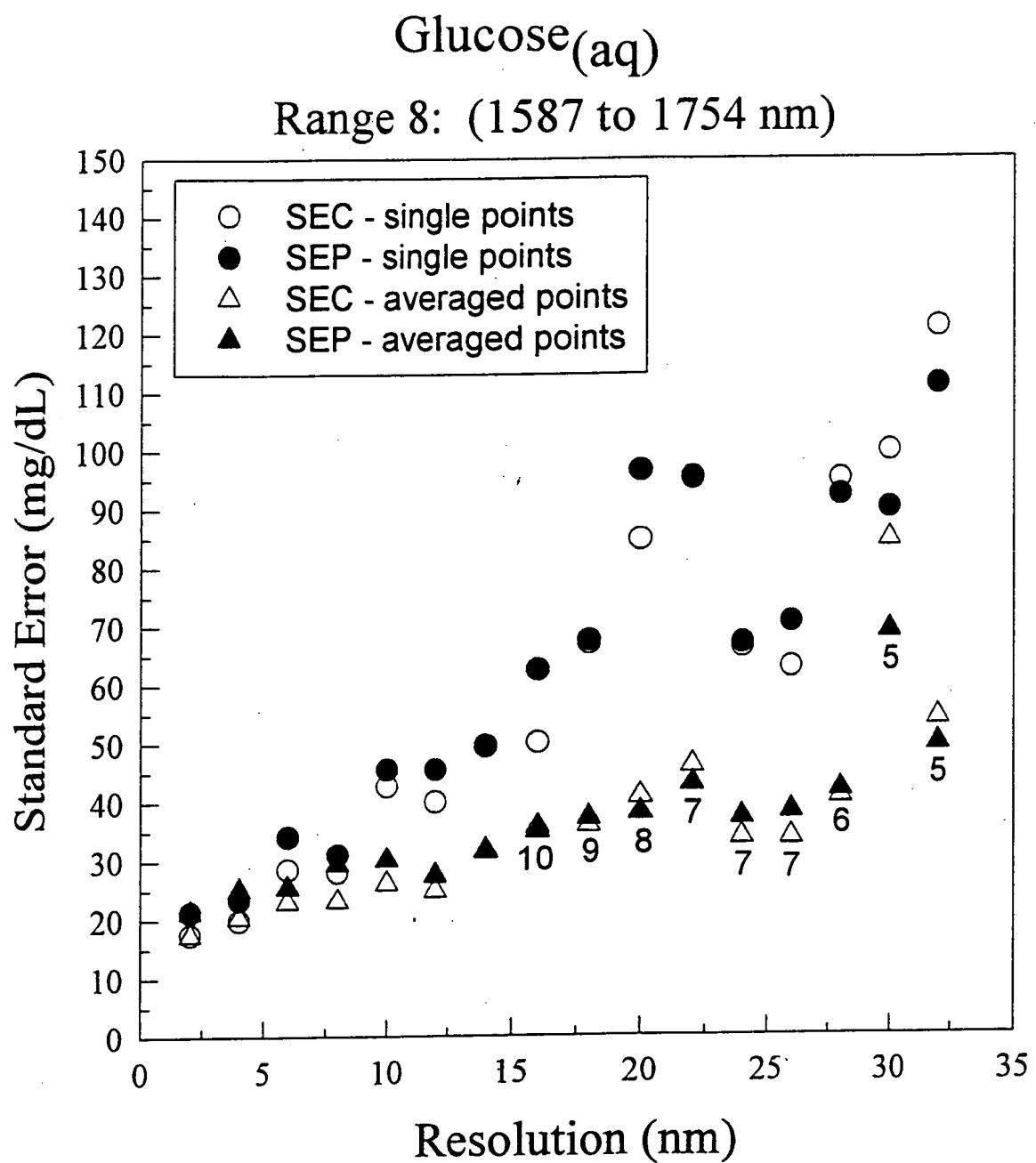


FIG. 19

Glucose<sub>(aq)</sub>

Range 8: (1587 to 1754 nm); averaged points, 6PLS Factors

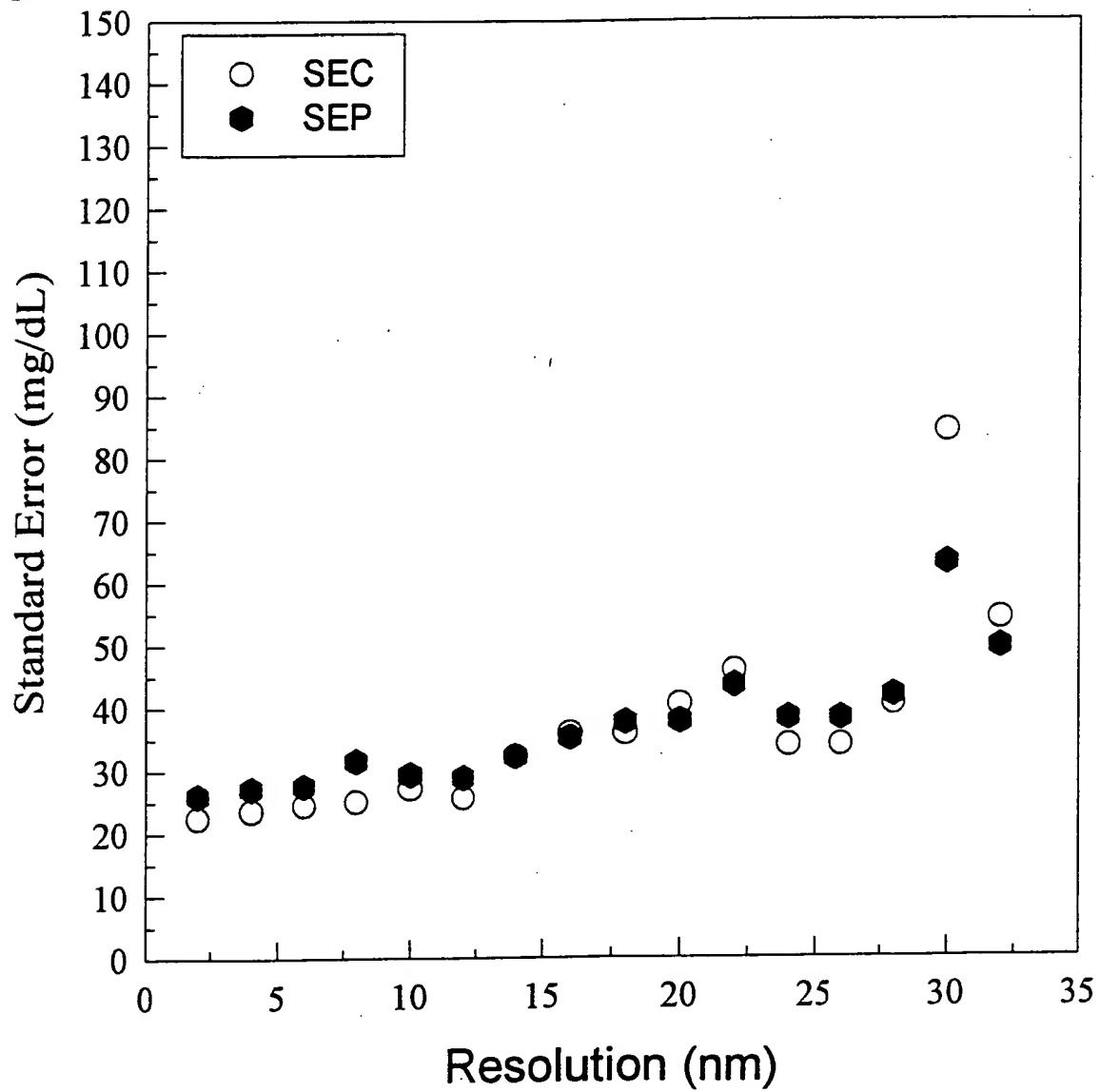


FIG. 20

Glucose in Serum  
Range 1: (2078 to 2243 nm)

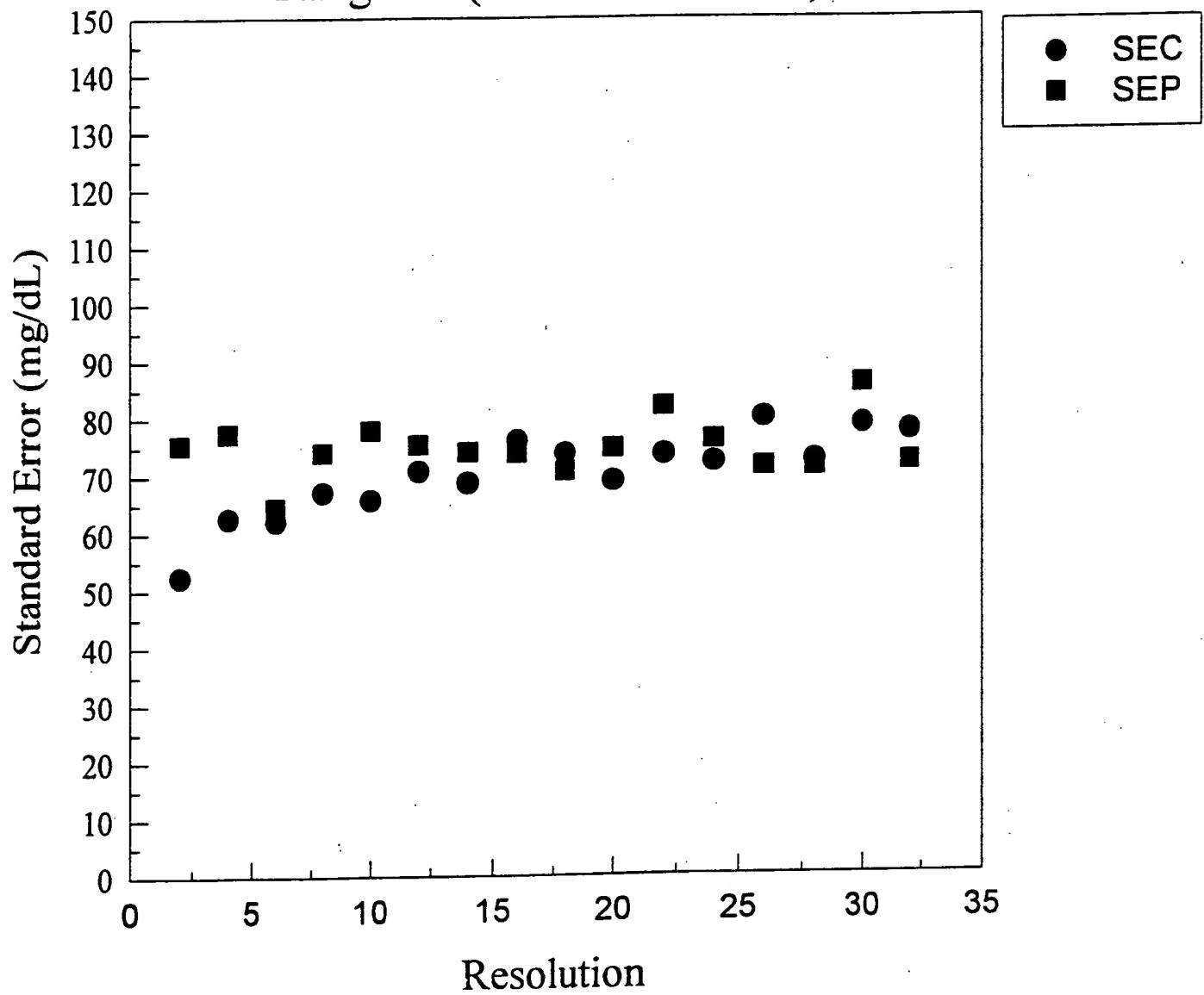


FIG. 21

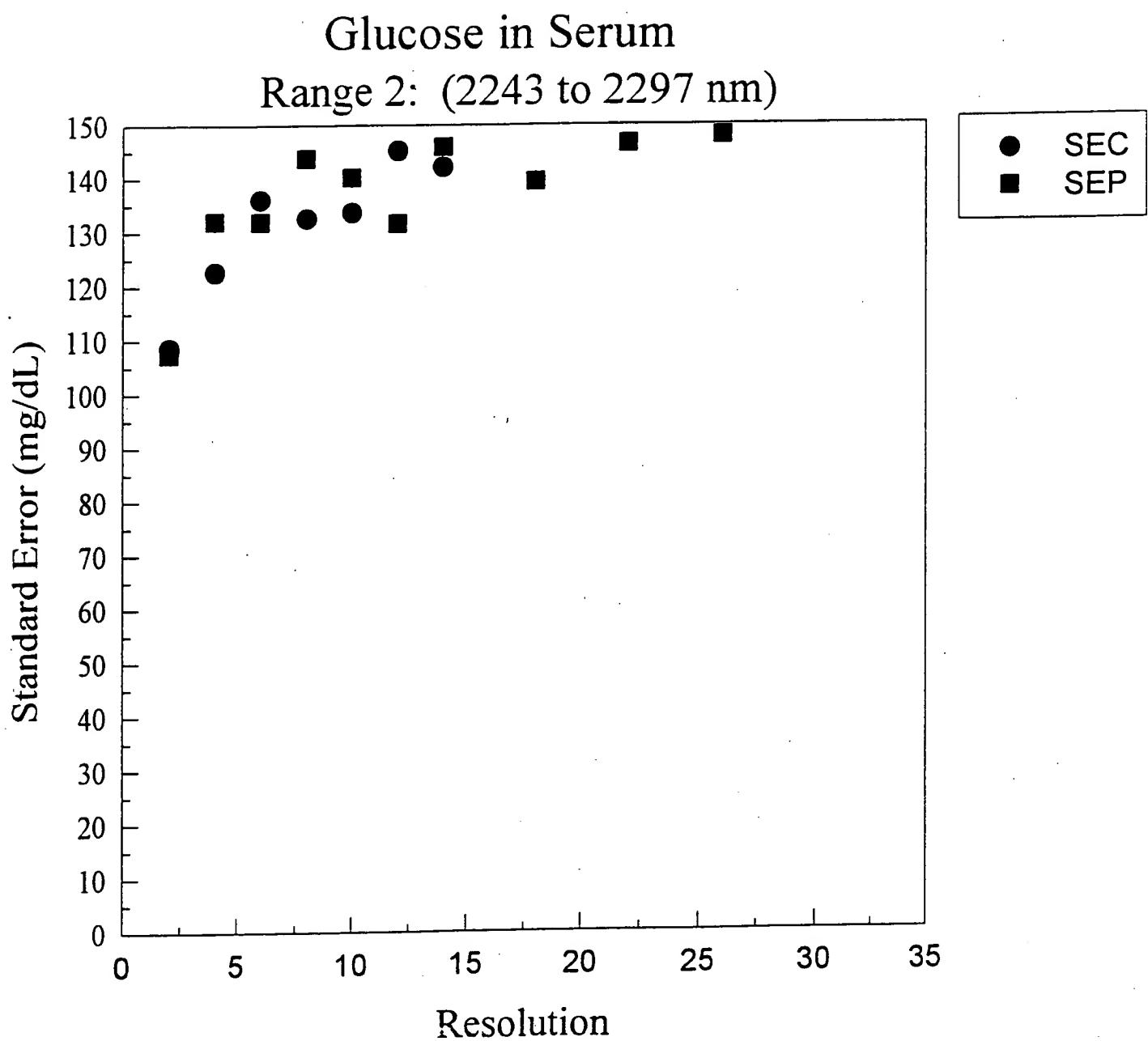


FIG. 22

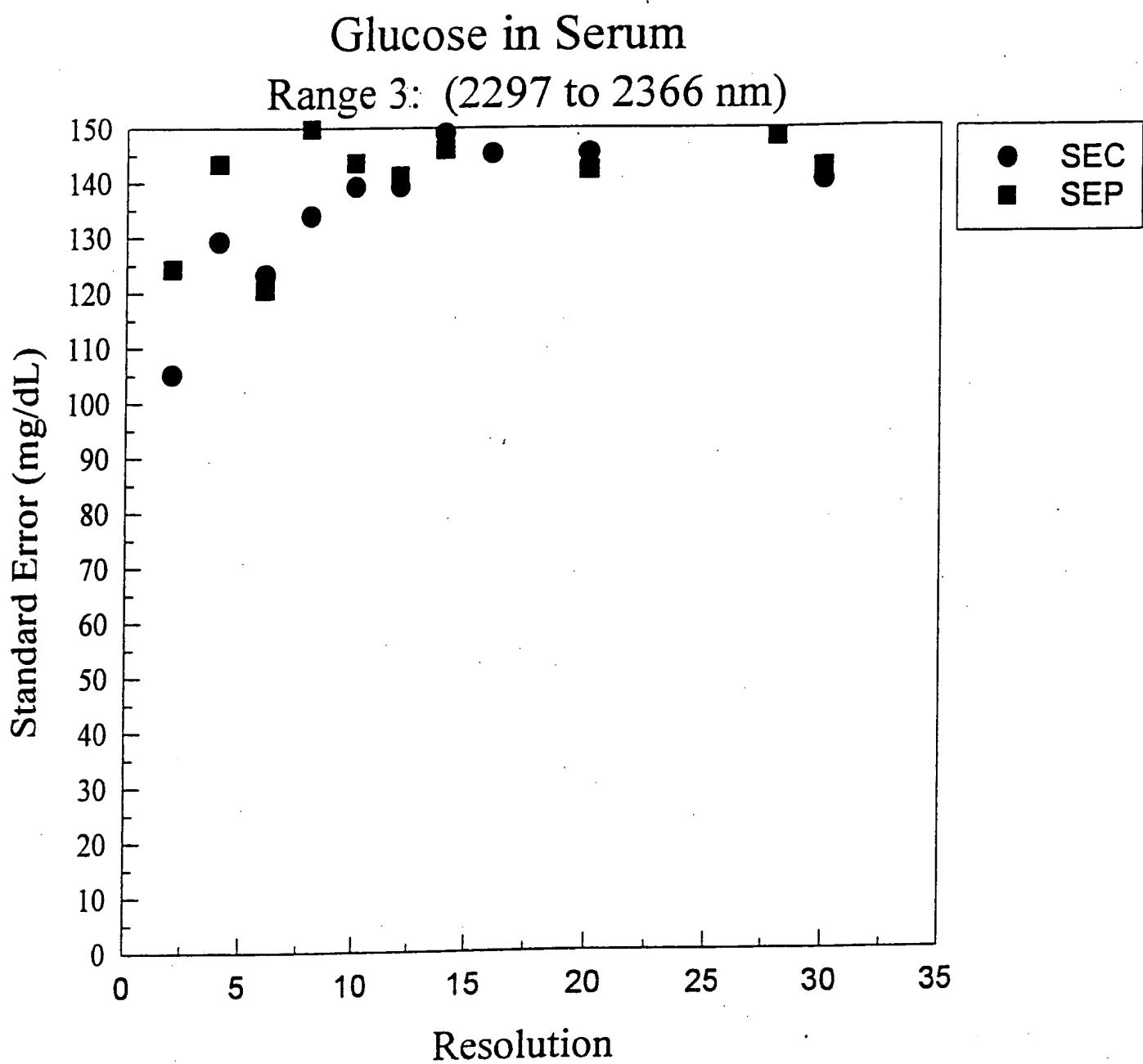


FIG. 23

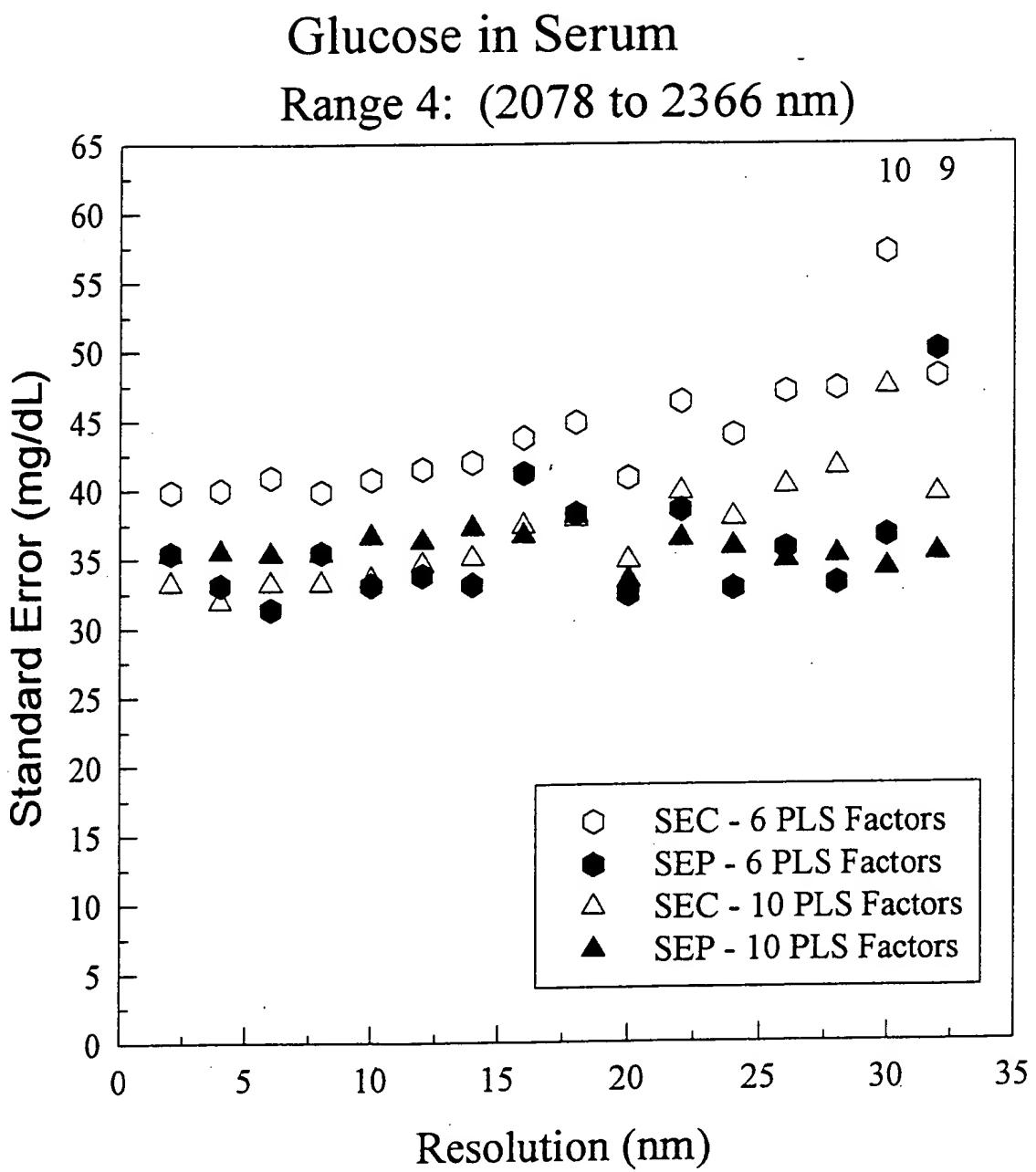


FIG. 24

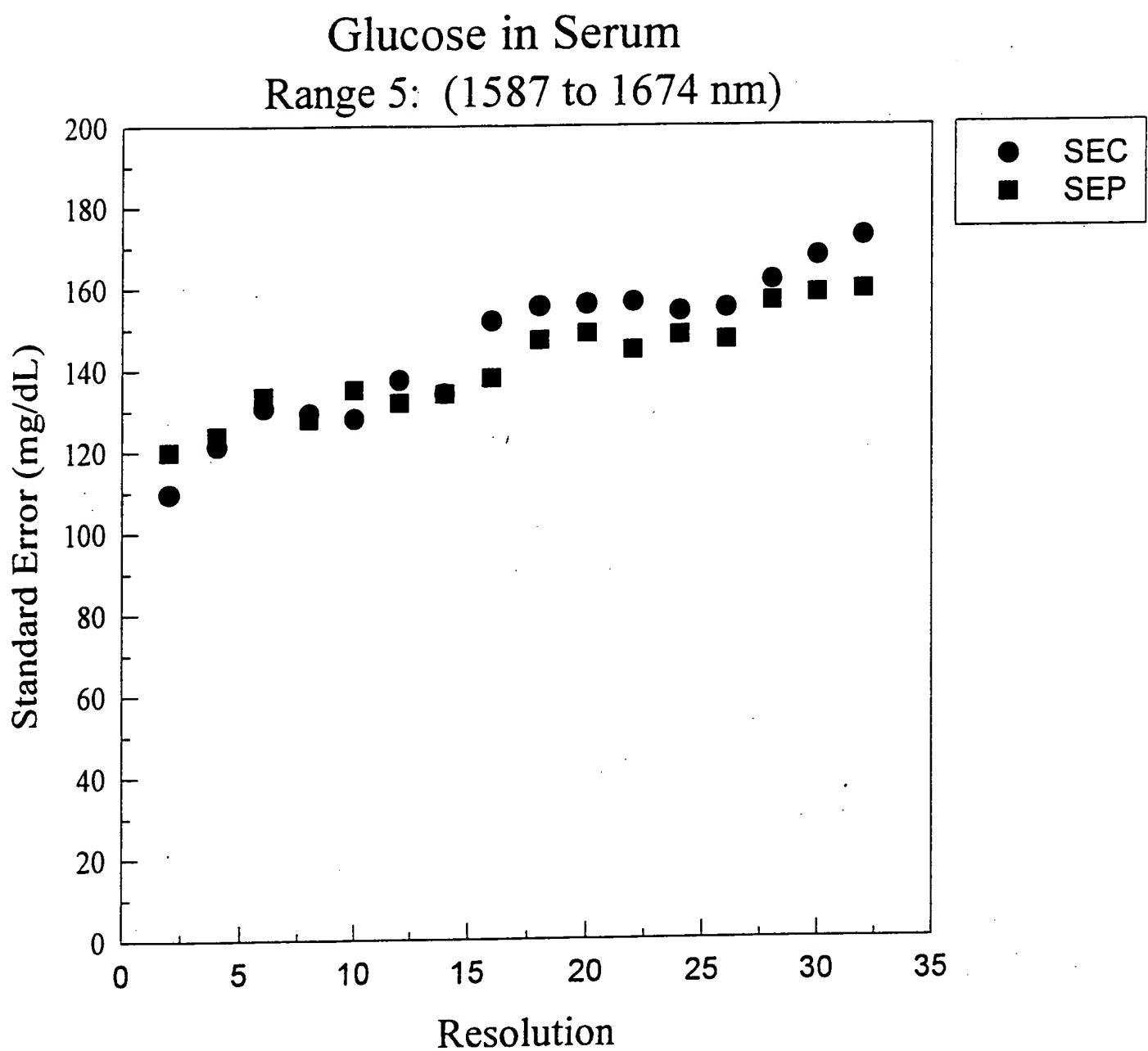


FIG. 25

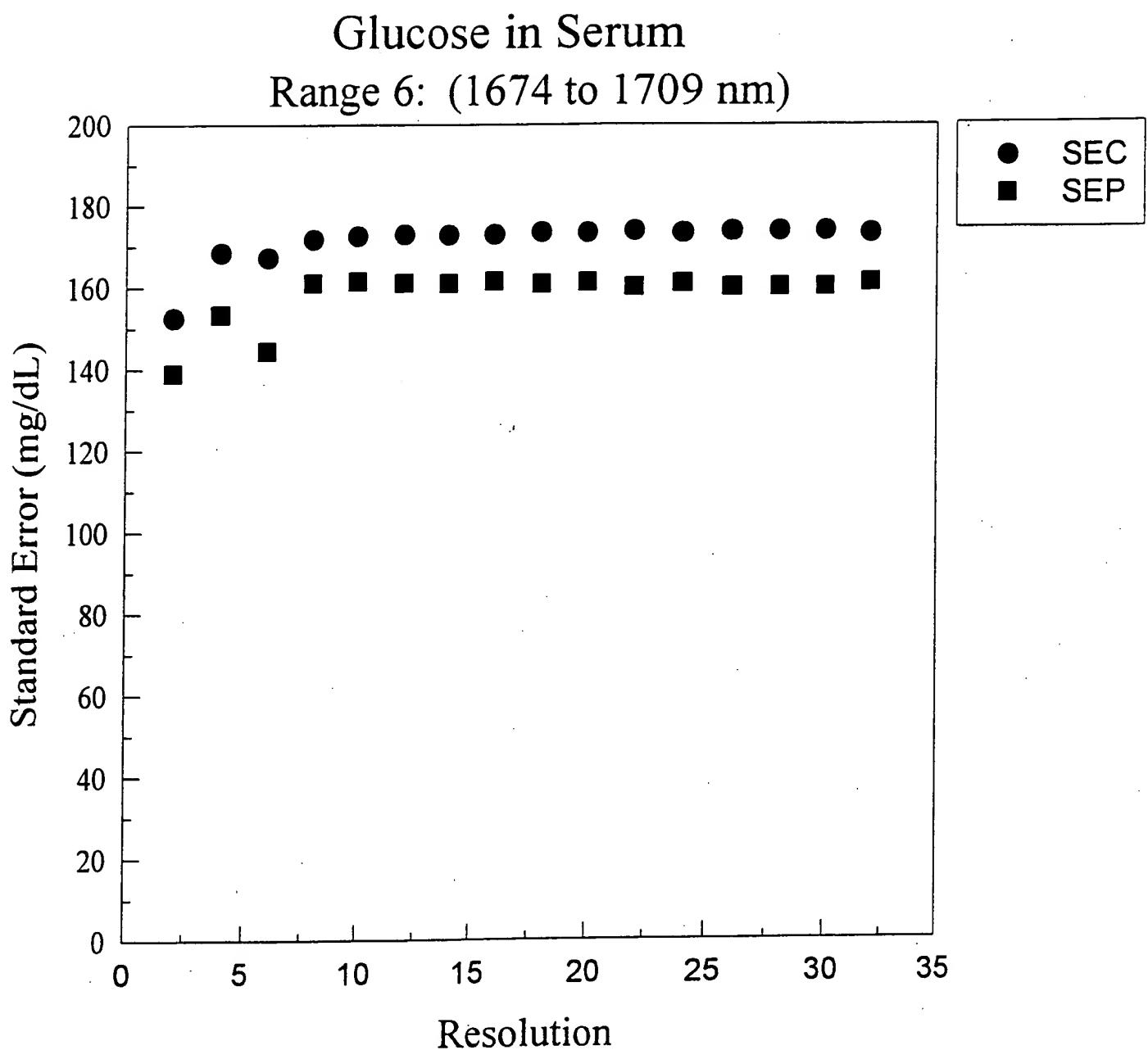


FIG. 26

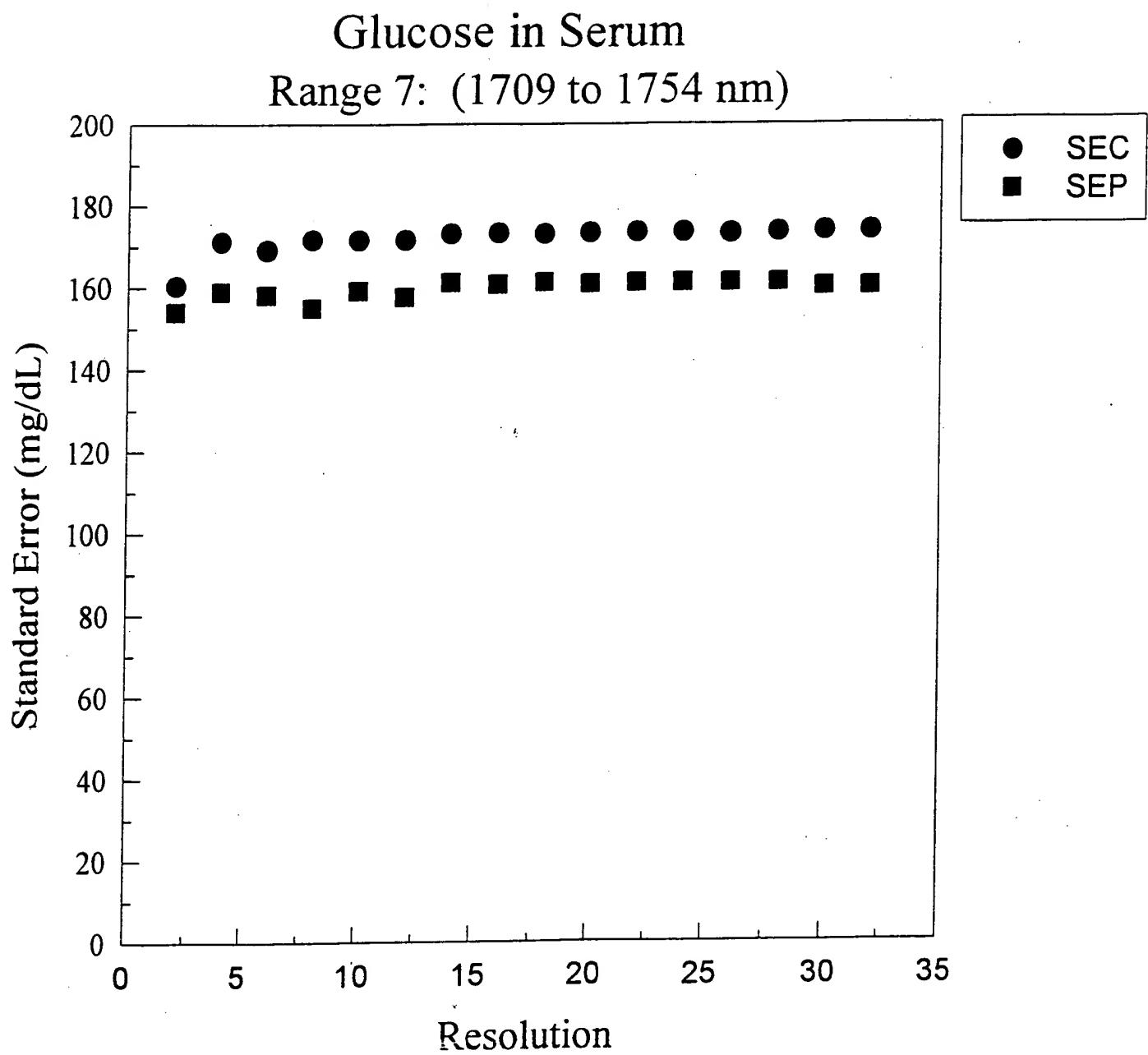


FIG. 27

## Glucose in Serum

Range 8: (1587 to 1754 nm)

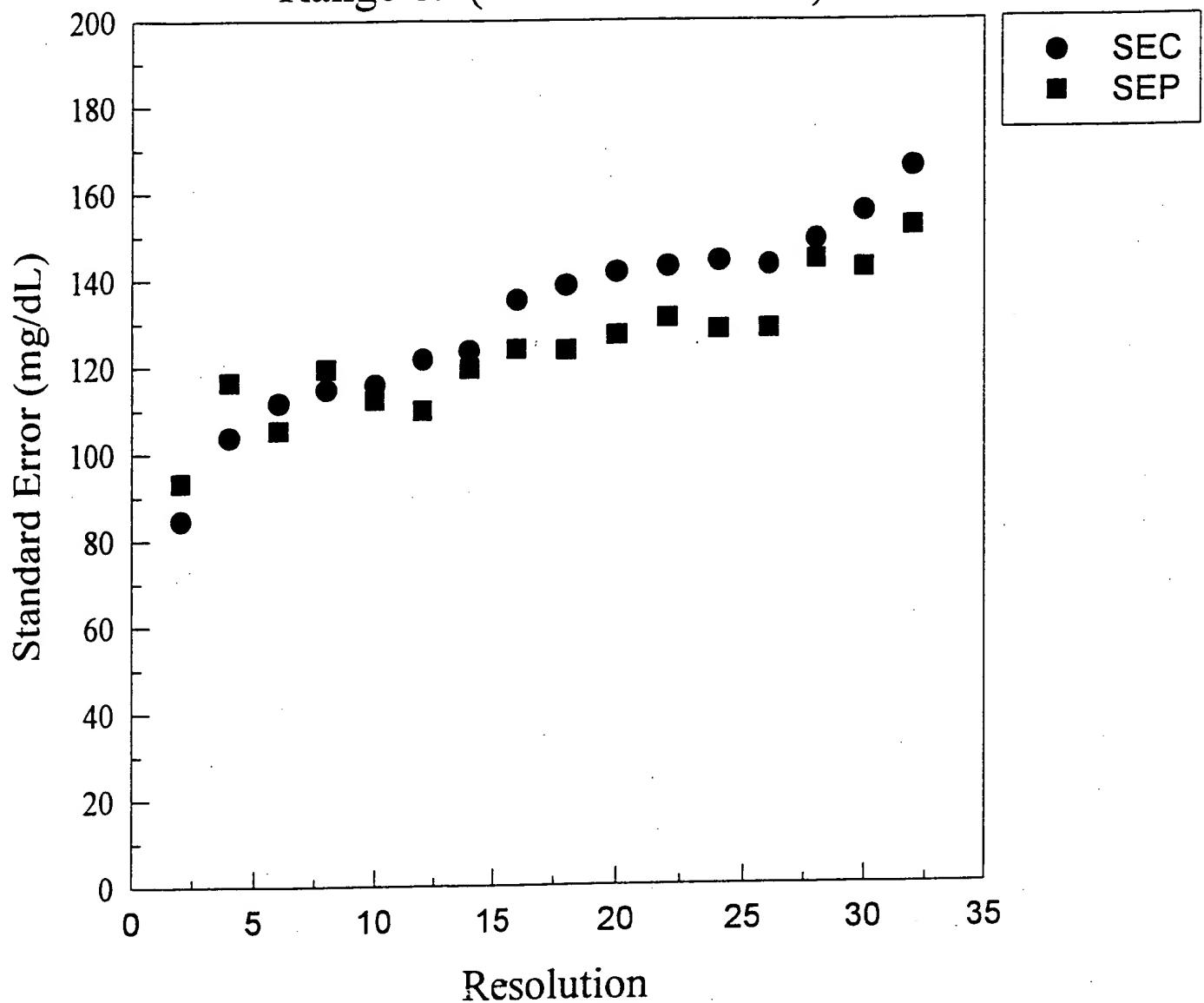


FIG. 28

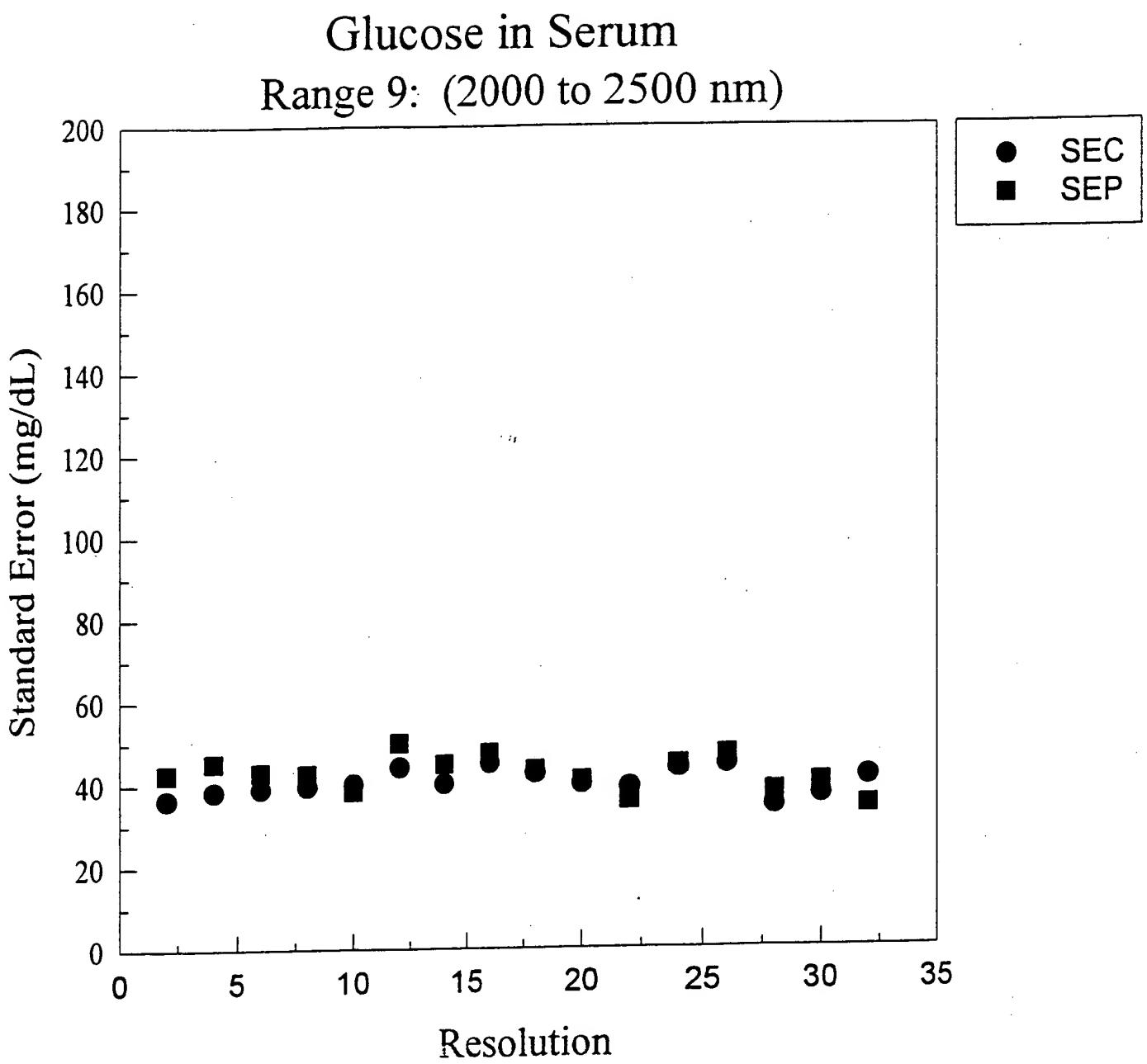


FIG. 29

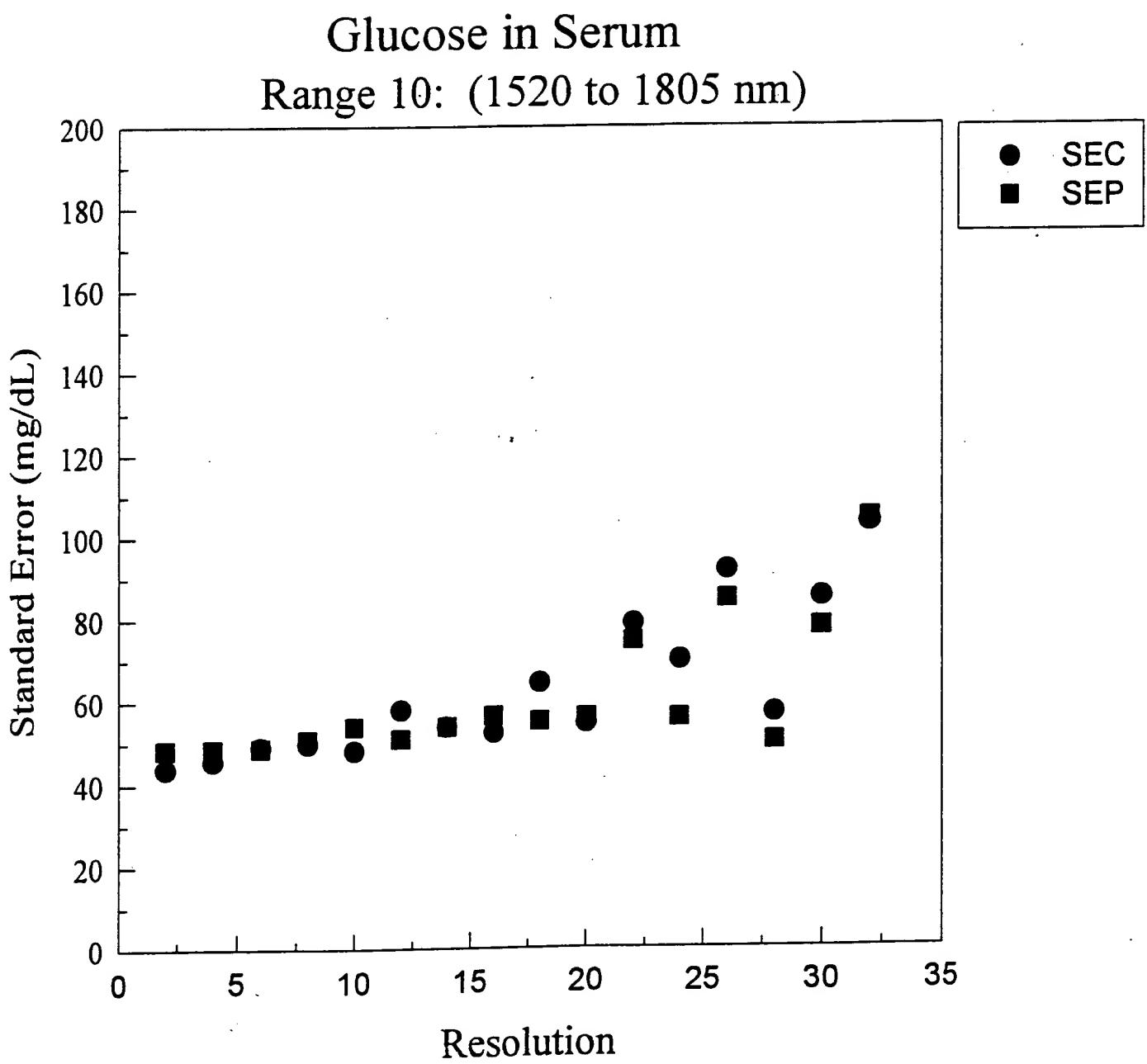


FIG. 30

Glucose in Serum  
Range 8: (1587 to 1754 nm)

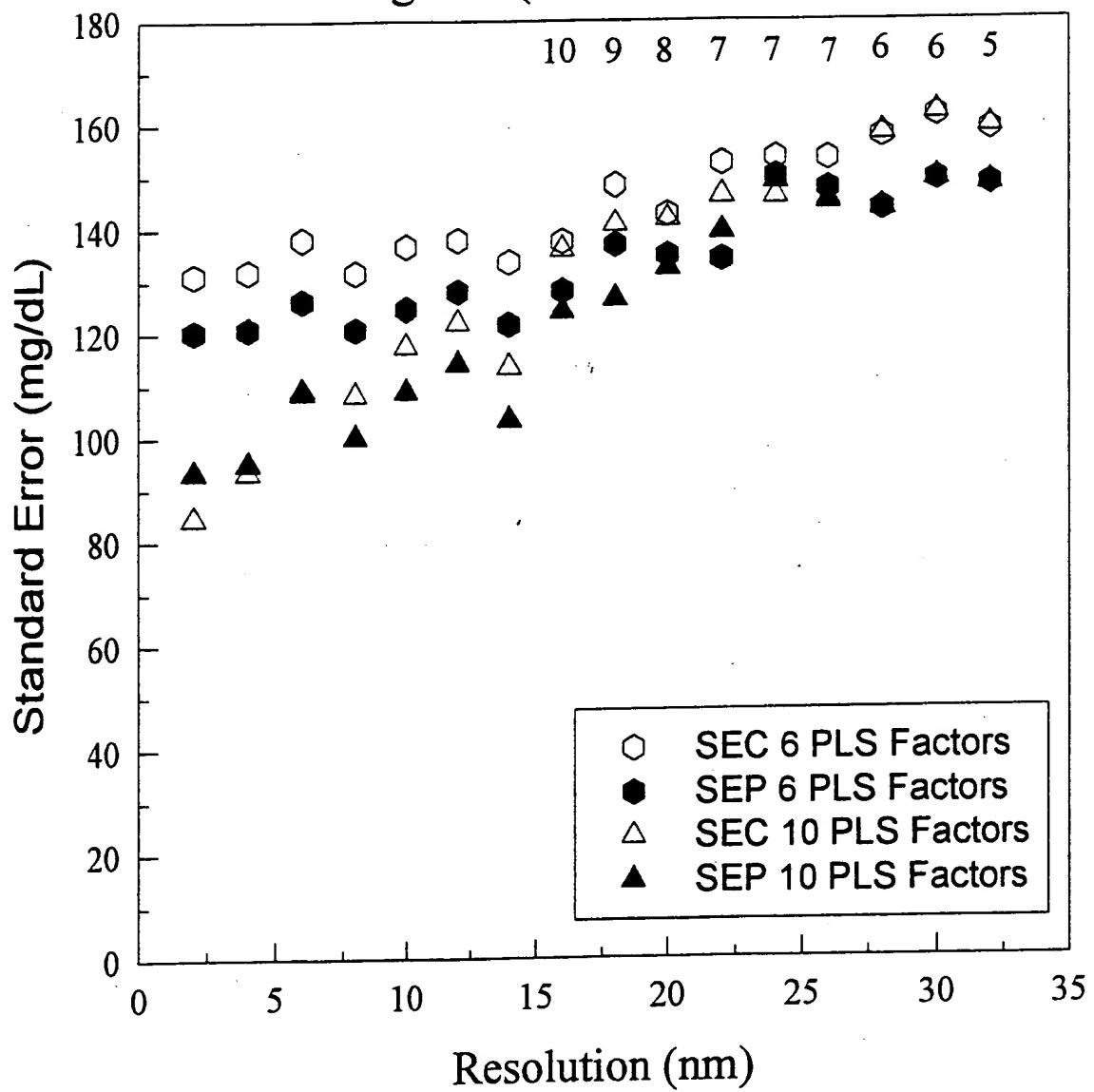


FIG. 31

Raw Absorbance  
55 M Water; 8000 Albumin; 2000 Globulin; 200 Triacetin

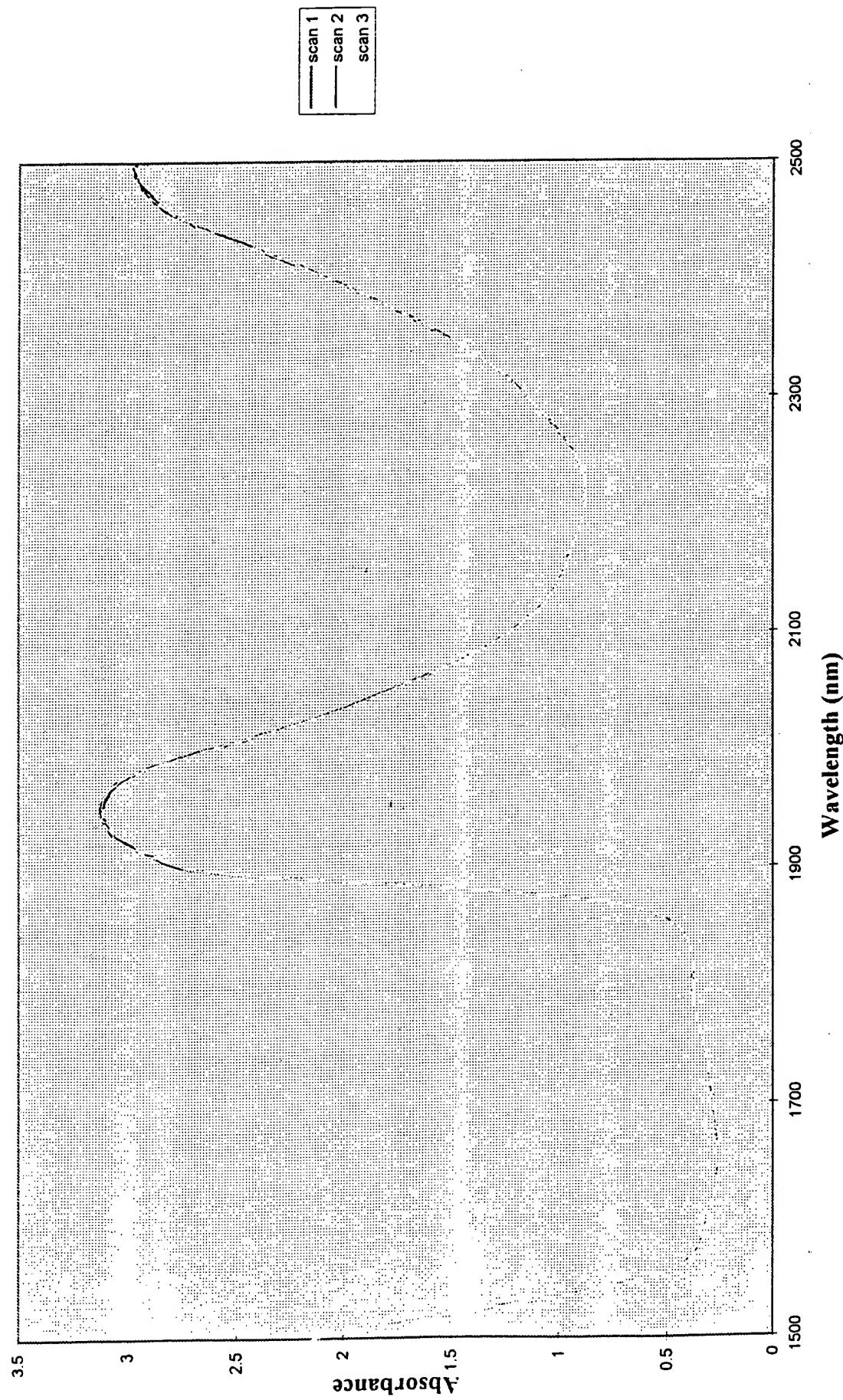
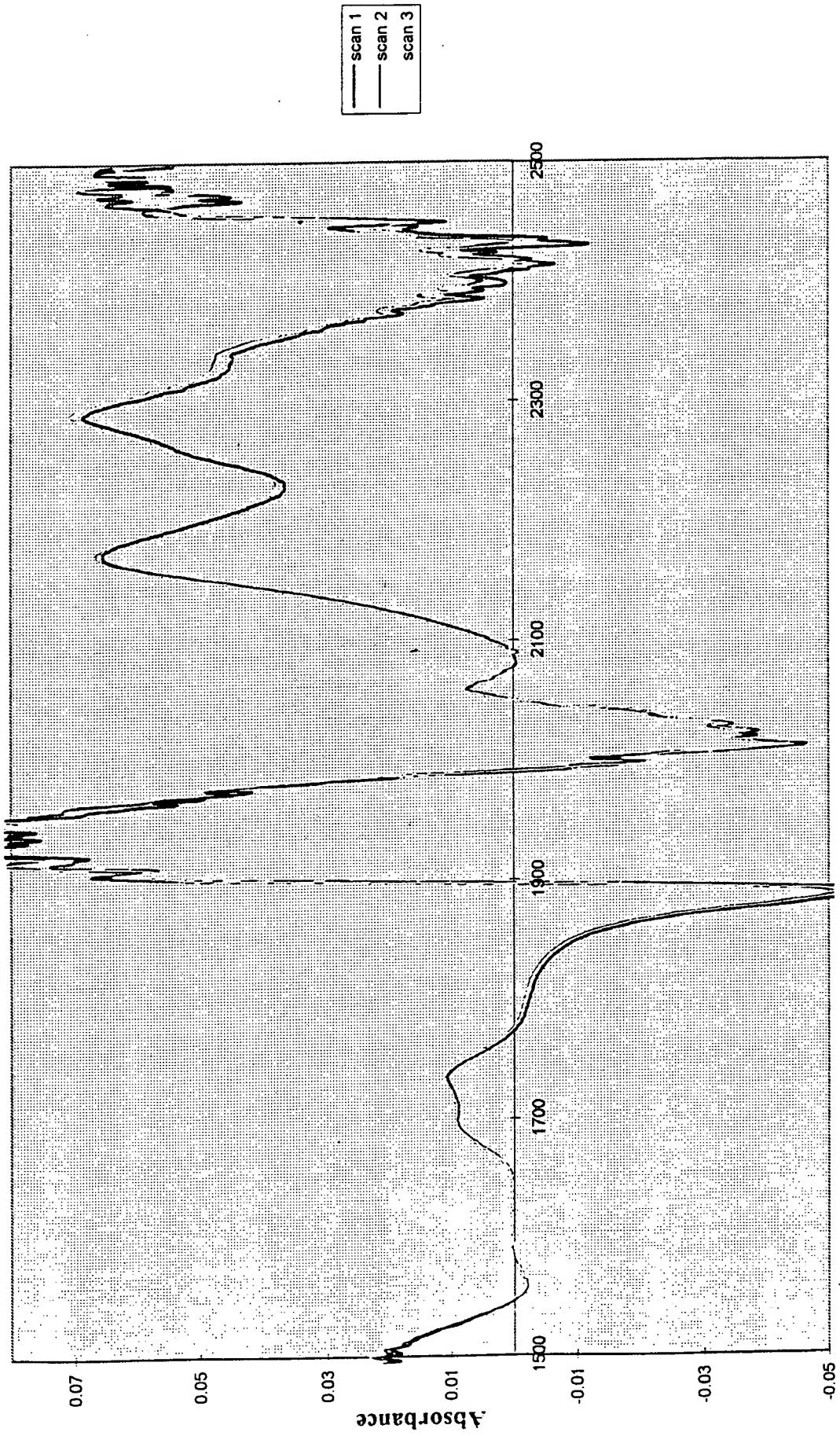


FIG. 32

Water Subtracted (Temperature and Pathlength Corrected)  
8000 mg/dL albumin; 2000 mg/dL globulin; 200 mg/dL triacetin



Wavelength (nm)

FIG. 33

Linearity Study: Albumin Spectra  
Temperature and Pathlength Corrected

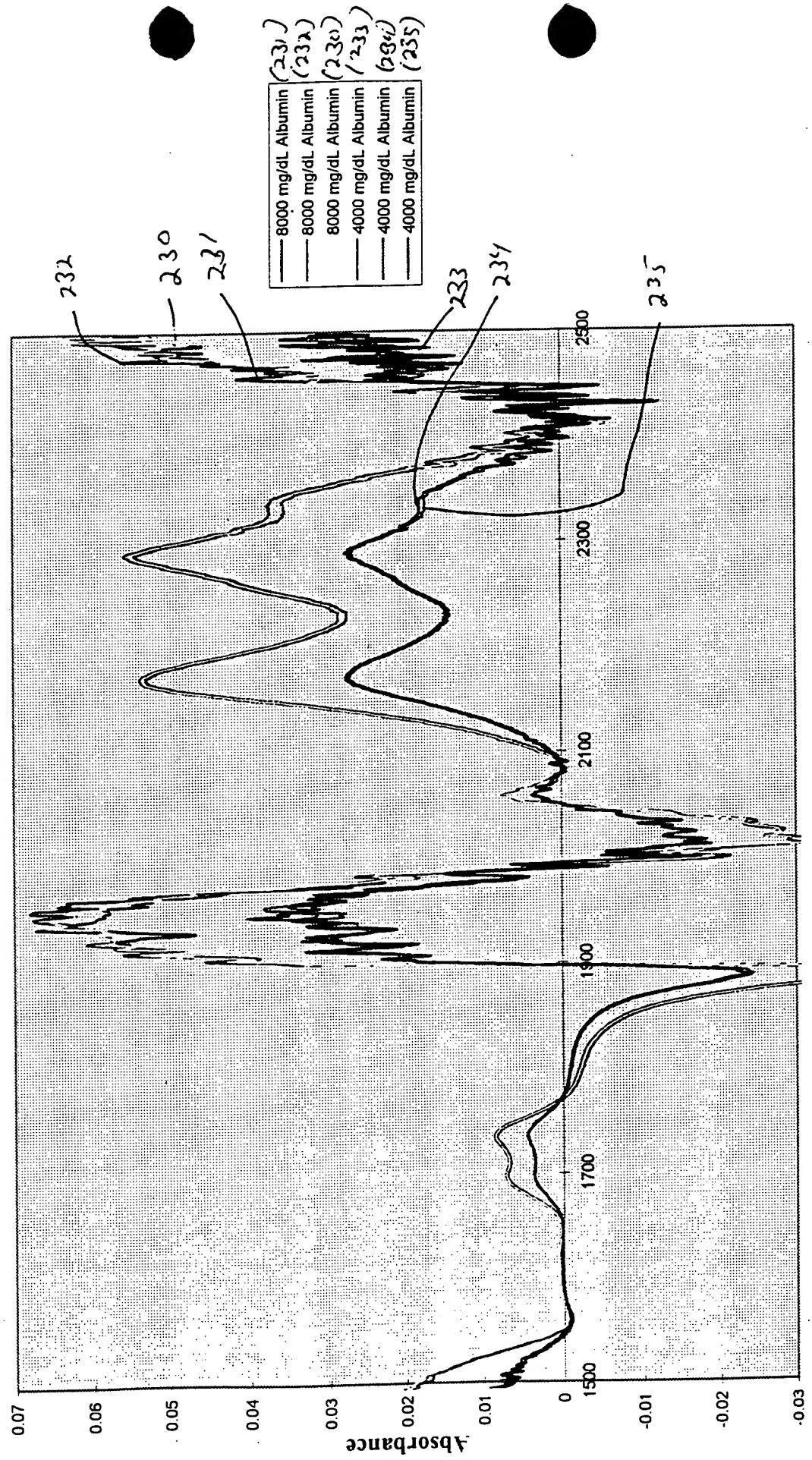


FIG. 34

Water & 8000 Albumin Subtracted  
2000 Globulin; 200 Triacetin

2410 2420

0.02

0.015

0.01

0.005

0

-0.005

Absorbance

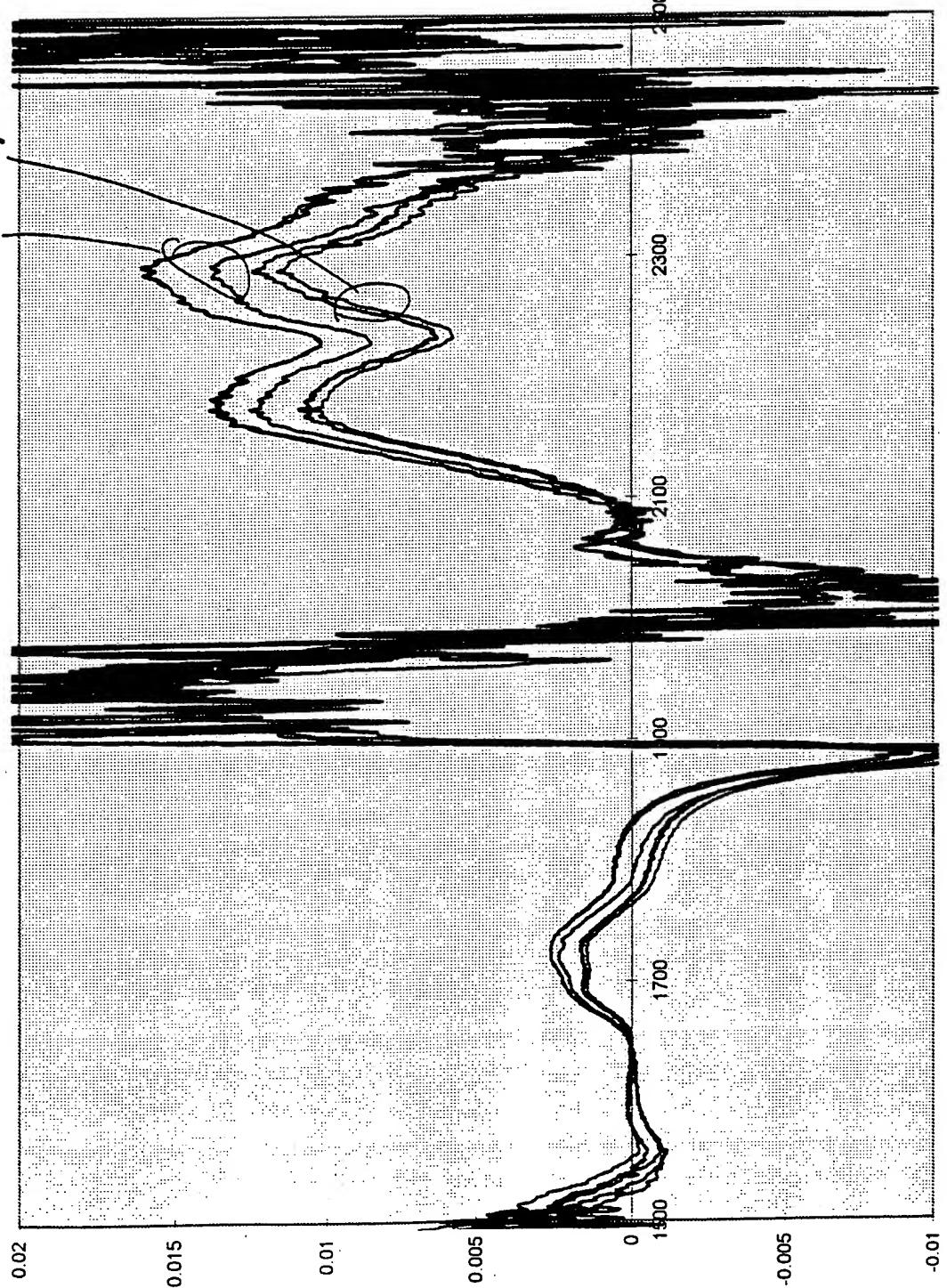


FIG. 35

Linearity Study: Globulin Absorbance  
Temperature and Pathlength Corrected

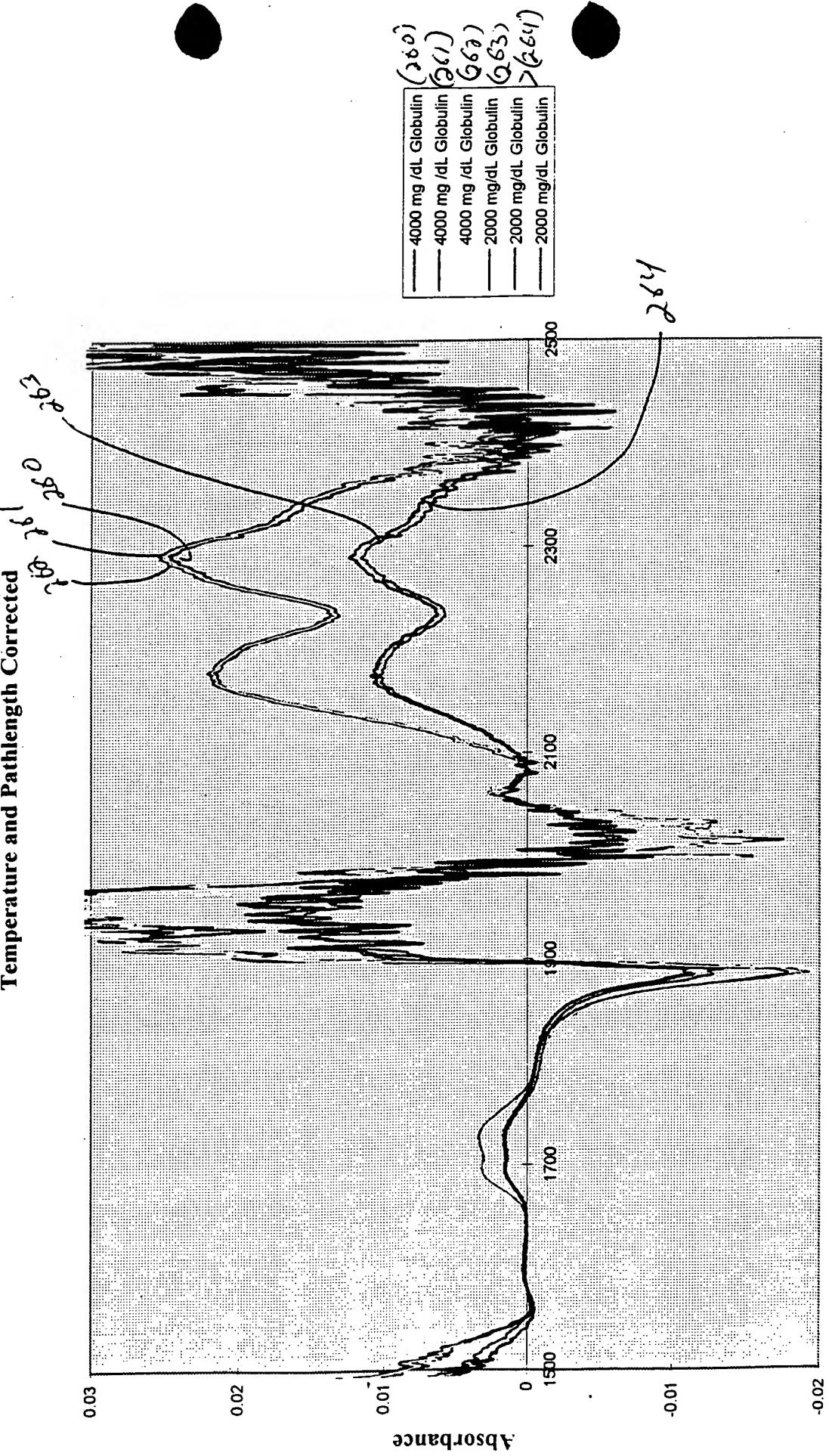


FIG. 36

Wavelength (nm)

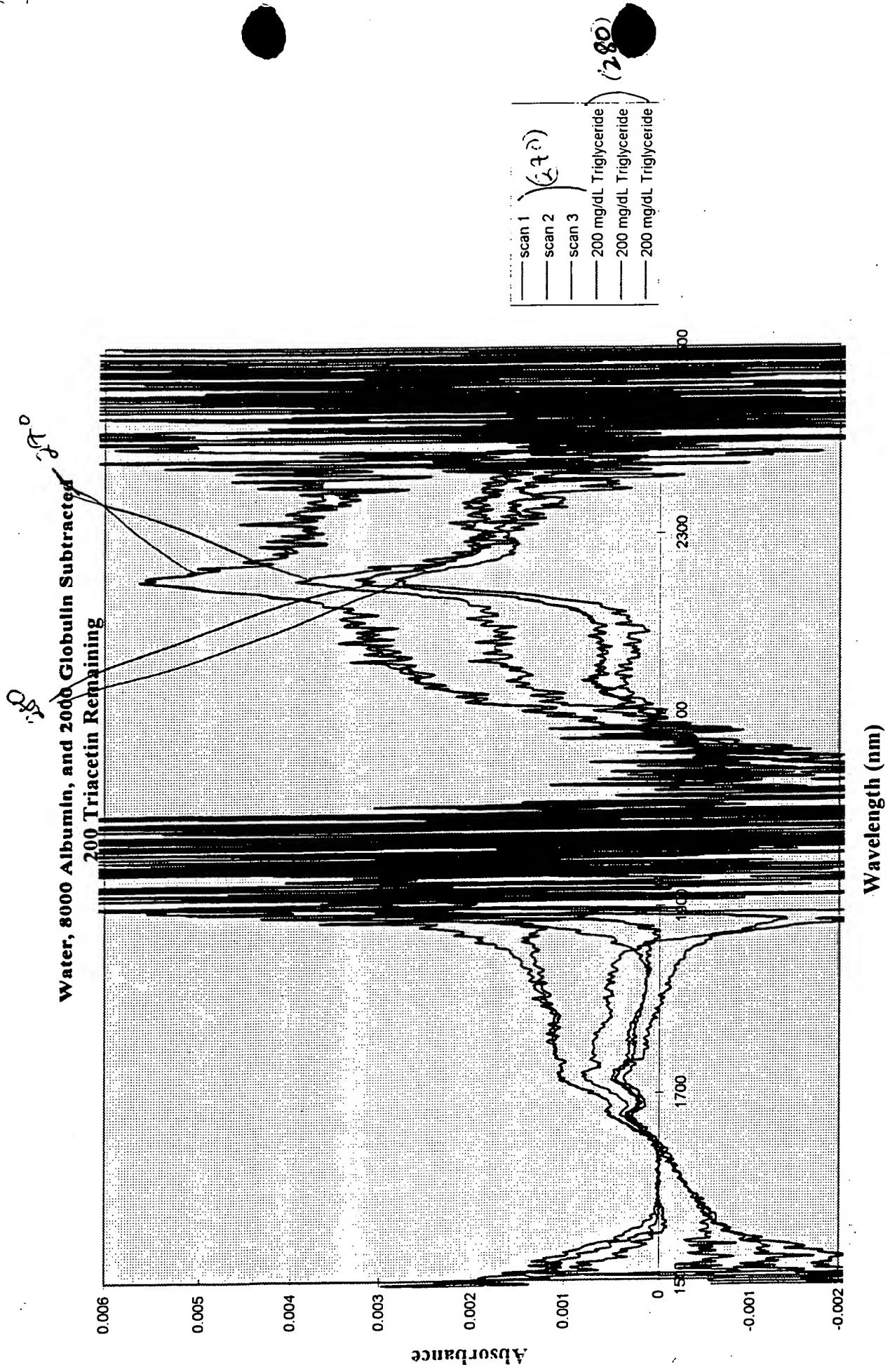


FIG. 37